

CORNWALL COUNTY COUNCIL

INSTITUTE OF SOCIAL
MEDICINE

10, PARKS ROAD,
OXFORD

ANNUAL REPORT
OF THE
COUNTY MEDICAL OFFICER
OF HEALTH
1950

R. N. CURNOW, M.B., B.S., D.P.H.

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HEALTH COMMITTEE

(as constituted at 31st December, 1950).

Chairman:

Mrs. M. F. WILLIAMS

Vice-Chairman:

W. S. RASHLEIGH

Members:

Mrs. M. T. ANDREWS	N. S. LYNE
Mrs. H. C. C. ASHER	W. E. MILLER
Mrs. A. M. BLACKWOOD	A. T. OPIE
Major C. A. E. CHUDLEIGH	J. C. PENBERTHY
J. DANIEL	W. J. T. PETERS
T. B. EDDY	J. READ
J. H. B. HARRIS	A. J. ROBERTS
J. H. HAWKEN	C. L. ROSEWARNE
H. B. LAITY	P. M. WILLIAMS
Mrs. P. LANYON	2 vacancies
E. G. LILLEY	

Representatives of Area Sub-Committees:

Area I Mrs. K. POOLE	Area IV A. BELLINGHAM
Area II Mrs. M. E. COCHRANE-DYET	Area V Mrs. D. M. WILLS
Area III Dr. E. H. EASTCOTT	Area VI J. SETCHELL
Area VII D. P. PEACOCK	

Co-Opted Members:

Dr. I. W. HORSLEY	... British Red Cross Society
Miss MARGARET SMITH	... Cornwall County Nursing Association
Dr. W. L. STEWART	... St. John Ambulance Brigade
Dr. W. LESLIE	... Local Medical Committee
The VISCOUNT CLIFDEN	... } Mental Health.
Miss J. A. FOSTER	... }

Ex Officio:

The Chairman of the County Council.
 The Vice-Chairman of the County Council.
 The Chairman of the Finance Committee.

To the Chairman and Members of the Cornwall County Council.

My Lord, Ladies and Gentlemen,

I have the honour to present the Annual Report on the Health of the County of Cornwall during the year 1950.

The vital statistics show the continuing improvement in the health of the County. The Maternal Mortality quinquennial rate is the lowest on record, and the Infant Mortality rate is a record low figure for the fourth year in succession.

The body of the Report contains details of the continuing re-organisation of the County Health Services. The Nursing Service has benefitted considerably by the expenditure of the Council on qualifying and post-graduate courses. Re-organisation has enabled a further reduction to be obtained in the number of Nurses employed by a more rational arrangement of their areas, and by the provision of telephones and cars. The steady rise in the level of qualifications of the members of the Nursing Staff, and the provision of gas and air analgesia is, I think, responsible for a slight falling off in the pressure on hospital maternity accommodation, and an increased preference for confinement at home. The Home Help Service has increased to such an extent during the last 2 years that assistance has been given to 772 households in 1950 as compared with 200 in the year 1948. The Ambulance Service continues to carry its heavy load satisfactorily, in spite of the difficulty of obtaining new ambulances in place of the very old ones which still have to function. Two matters which cause some anxiety are the fall in the Diphtheria Immunisation rate, which is probably due to a false sense of security brought about by the absence of Diphtheria from many parts of the County for some years; and the continued difficulty in which the Dental Service finds itself owing to lack of staff.

Continued progress was made during the year in the negotiations for the use of the De Lank River as a source of water supply for the major part of the County. At the time of writing this Report, the necessary steps are being taken to enable application to be made to the Ministry for the formation of a Joint Board.

However, I draw the attention of readers of this Report most particularly to the Section on Epidemiology and Preventive Medicine. There they will find an account of the volume of work being carried out in an attempt

to determine the cause of certain diseases, and the practical steps which are being taken to prevent illnesses which are capable of prevention. This Section, in the middle of the Report, followed appropriately enough by an enlarged Section on Health Education, sets forth our attempt to be true practitioners of the art of preventive medicine.

I repeat my acknowledgment of the help and consideration I have received from the Chairman and members of my Committee, both collectively and individually, and the loyal assistance I have received from my staff.

I am,

Your obedient Servant,

R. N. CURNOW,

County Medical Officer.

September, 1951.

CORNWALL COUNTY COUNCIL

REPORT OF THE COUNTY MEDICAL OFFICER OF HEALTH FOR THE YEAR 1950.

PUBLIC HEALTH OFFICERS:

County Medical Officer of Health and School Medical Officer:

R. N. CURNOW, M.B., B.S., D.P.H.

Deputy County Medical Officer and Deputy School Medical Officer:

E. R. HARGREAVES, M.A., M.D., B.Ch., D.P.H.

Assistant County Medical Officer and Supervisor of Midwives:

ANNIE MATHER, M.B., Ch.B., D.P.H.

Assistant County Medical Officers:

Area 1 (Penzance)—

W. K. DUNSCOMBE, M.D., B.S., M.R.C.S., L.R.C.P., D.P.H.,
D.T.M. & H.

Area 2 (Redruth)—

G. W. KNIGHT, M.B., Ch.B., D.P.H.

Area 3 (Truro)—

V. E. WHITMAN, B.Sc., M.R.C.S., L.R.C.P., D.P.H., D.T.M. & H.

Area 4 (St. Austell)—

J. G. S. TURNER, C.M.G., M.B., Ch.B., B.Sc., D.P.H., D.T.M.
(Com. 1.2.50).

Area 5 (Wadebridge)—

*J. REED, M.B., Ch.B., B.Sc., D.P.H.

Area 6 (Launceston)—

*L. RICH, M.B., Ch.B., D.P.H., M.R.C.O.G.

Area 7 (Liskeard)—

P. J. FOX, M.B., B.Ch., D.P.H.

*Also Assistant School Medical Officer.

County Psychiatrist:

S. W. DAVIES, M.R.C.S., L.R.C.P., D.P.M. (left 6.8.50).

D. JACKSON, M.A., M.B., Ch.B., D.P.M. (com. 1.9.50).

Senior Assistant School Medical Officer:

C. C. ELLIOTT, D.S.C., V.R.D., M.D.

Assistant School Medical Officers:

DOROTHY A. CHOWN, M.R.C.S., L.R.C.P.
 MURIEL V. JOSCELYNE, M.B., Ch.B., D.P.H.
 JEAN D. McKELLAR, M.B., B.S.
 JEAN D. McMILLAN, B.Sc., M.B., Ch.B.
 G. D. K. NEEDHAM, M.R.C.S., L.R.C.P., D.P.H.
 §J. REED, M.B., Ch.B., B.Sc., D.P.H.
 §L. RICH, M.B., Ch.B., D.P.H., M.R.C.O.G.
 B. ROBERTS, M.R.C.S., L.R.C.P.
 WINIFRED M. RYAN, M.R.C.S., L.R.C.P.

§Also Assistant County Medical Officer.

Chief Dental Officer:

K. BATTEN, L.D.S.

Assistant Dental Officers:

W. K. BATTEN, L.D.S.
 H. J. EAGLESON, L.D.S. (com. 11.12.50).
 P. W. EDDY, L.D.S.
 W. H. ELLAM, B.D.S.
 D. A. PATTERSON, L.D.S.
 F. H. STRANGER, L.D.S.
 F. R. TAYLOR, L.D.S.

County Sanitary Officer:

W. SHAW, Cert. R.S.I.

Assistant County Sanitary Officer:

W. G. SAUNDERS, Cert. R.S.I. (Com. 1.3.50).

County Nursing Officer, Non-Medical Supervisor of Midwives, and Superintendent Health Visitor:

Miss ANN WHITE, S.R.N., S.C.M., Q.N.S., H.V.Cert.

Deputy County Nursing Officer, etc.:

Miss M. WITTING, S.R.N., S.C.M., Q.N.S., H.V.Cert. (Left 31.8.50)
 Mrs. S. MEE, S.R.N., S.C.M., Q.N.S., H.V.Cert. (Com. 26.11.50)

Assistant County Nursing Officers:

Area 1—Miss M. BACH, S.R.N., S.C.M., Q.N.S., H.V.Cert (Left 2.12.50).
 Area 2—Miss C. GUEST, S.R.N., S.C.M., Q.N.S., H.V.Cert. (Left 14.11.50).
 Area 3—Miss E. MORAIN, S.R.N., S.C.M., Q.N.S., H.V.Cert.
 Area 4—Miss M. BATES, S.R.N., S.C.M., Q.N.S., H.V.Cert. (Left 3.5.50).
 Area 5—Miss S. KEELER, S.R.N., S.C.M., Q.N.S., H.V.Cert.
 Area 6.—Miss L. CULVERHOUSE, S.R.N., S.C.M., Q.N.S., H.V.Cert. (Com. 1.5.50).
 Area 7—Miss M. G. AUSTIN, S.R.N., S.C.M., Q.N.S., H.V.Cert.

County Ambulance Officer:

T. C. TRESIDDER

Divisional Ambulance Officers:

- Area 1—W. H. MAYCOCK
- Area 2—F. POLKINGHORNE
- Area 3—K. TREVENA (Com. 1.11.50).
- Area 4—D. C. B. PECKETT
- Areas 5 and 6—S. G. MATTHEWS
- Area 7—J. J. PEARCE.

Senior Mental Health Worker:

- Miss M. H. COURSE (Com. 16.1.50).

Mental Health Workers:

- Miss B. M. SYRETT.
- Miss K. M. WELSH (Left 7.10.50).
- Miss F. M. JONES, Social Science Diploma (Com. 4.12.50).

Mental Health Social Worker:

- Mrs. J. M. STEPHENS, B.A. (Cantab.), Social Science Diploma.
(Left 30.9.50).

Duly Authorised Officers:

- Area 1—P. A. CLIFTON
- Area 2—F. A. MARKS
- Area 3—S. R. MOYSE
- Area 4—W. St. A. SWEET
- Area 5—A. J. ARMSTRONG
- Area 6—C. WARD (retired 31.3.50), H. DAVEY (com. 21.8.50).
- Area 7—W. V. COUCH

County Home Help Organiser:

- Mrs. E. L. CROTHERS (Com. 1.8.50).

Speech Therapist:

- Miss J. ROWLEY-LEWIS, L.C.S.T.

Chief Clerk:

- J. R. SANDERS.

PART-TIME OFFICERS:**Chief Inspector under Food and Drugs Acts:**

- K. R. C. MARTIN (also Chief Inspector of Weights & Measures).

Public Analyst:

- H. E. COX, D.Sc., Ph.D., F.I.C.,
The Laboratory, 11 Billiter Square, London, E.C.3.

County Pathologist:

- F. D. M. HOCKING, M.Sc., M.B., B.S., F.I.C., F.C.S.,
Royal Cornwall Infirmary, Truro.

County Chest Physician:

- J. G. CAIRNS, M.B., Ch.B., D.P.H.

Assistant County Chest Physician:

- STELLA M. LUTY, M.B., B.S.

STATISTICS AND SOCIAL CONDITIONS

Area of the County	864,126 acres
Population, 1950 (Registrar General's estimate) ...	339,999
Population, 1931 census	316,228
Number of inhabited houses (1931 census)	83,544
Rateable Value	£1,804,408
Sum represented by a penny rate	£7,243

The Registrar General's mid-year estimate of the population for the Urban and Rural areas during each of the five years 1946—50 is shown in the following table:—

	1946	1947	1948	1949	1950
Urban Districts ..	176,960	178,990	182,165	187,292	187,657
Rural Districts ...	141,179	142,615	147,663	147,955	152,342
Administrative County ...	318,139	321,605	329,828	330,247	339,999*
Increase or decrease over previous year ..	+ 4,580	+ 3,466	+ 8,223	+ 419	+ 9,752*

* includes 7,570 non-civilians stationed in the County.

Table I at the end of the Report shows the estimated population and number of births and deaths for 1950 in each of the Sanitary Districts of the County, whilst Table II gives a summary for the County for recent years

Births and Birth Rate

Live Births

			Male	Female	Total
Legitimate	...	..	2,290	2,219	4,509
Illegitimate	...	...	124	125	249
			<hr/>	<hr/>	<hr/>
Total	...	...	2,414	2,344	4,758
			<hr/>	<hr/>	<hr/>
Birth rate per 1,000 of the population			...	...	13.99

Still Births

	Male	Female	Total
Legitimate	62	56	118
Illegitimate	4	3	7
Total	66	59	125

Still birth Rate per 1,000 of the population ... 0.37

The Birth Rate of 13.99 in Cornwall compares with a rate of 15.41 in 1949 and 15.8 for England and Wales. The following are the rates in recent years:—

				Cornwall	England & Wales
1941	...	...	...	12.47	14.2
1942	...	...	...	14.34	15.8
1943	...	...	...	15.19	16.5
1944	...	...	...	17.59	17.6
1945	...	...	...	16.08	16.1
1946	...	...	...	18.09	19.1
1947	...	...	...	19.00	20.5
1948	...	...	...	16.33	17.9
1949	...	...	...	15.41	16.7
1950	...	...	...	13.99	15.8

Deaths and Death Rate

Deaths registered in or belonging to the County during the year were as follows:—

Males	...	...	...	2,238
Females	...	...	...	2,418
Total	...	...	...	<u>4,656</u>

This gives a death rate of 13.69 as compared with 14.10 in 1949 and 11.6 for England and Wales.

The following are the rates for recent years:—

				Cornwall	England & Wales
1941	...	...	...	13.96	12.9
1942	...	...	...	12.84	11.6
1943	...	...	...	14.02	12.1
1944	...	...	...	14.13	11.6
1945	...	...	...	14.61	11.4
1946	...	...	...	14.32	11.5
1947	...	...	...	14.72	12.0
1948	...	...	...	12.93	10.8
1949	...	...	...	14.10	11.7
1950	...	...	...	13.69	11.6

Maternal Mortality

Maternal deaths are no longer distinguished between those due to Puerperal Sepsis and Other Puerperal Causes. There were 8 deaths classified to Pregnancy, Childbirth and Abortion, which gives a maternal mortality rate of 1.64 per 1,000 total births. This compares with a rate 0.38 for 1949 and 0.86 for England and Wales. The small numbers involved result in wide variations in the rate from year to year, and a more accurate impression is derived from a comparison of the rate for 1950 with the average rate for the previous five-year period (1945—49), which was 1.61.

Infant Mortality

There were 144 infant deaths, representing a rate of 30.26 per 1,000 live births, compared with 29.8 for England and Wales. The rate of infant mortality is generally considered to be the most sensitive index of the condition of the population from the hygienic point of view and a new record low figure has been reached for the fourth year in succession.

Chief causes of death at all ages:—

Disease of Heart and Blood Vessels ...	...	1,865
Cancer ... ..	...	678
Vascular Lesions of nervous system ...	...	606
Respiratory disease ... ..	...	396
Suicide and deaths from violence ...	...	145
Tuberculosis ... ..	...	126

Deaths from Heart Disease

Age Group	Urban Districts		Rural Districts		Total
	M.	F.	M.	F.	
0—1 ...	—	—	—	—	—
1—5 ...	—	—	—	—	—
5—15 ...	1	—	—	—	1
15—45 ...	4	4	—	2	10
45—65 ...	98	46	73	45	262
Over 65 ...	311	432	349	355	1,447
	<hr/> 414	<hr/> 482	<hr/> 422	<hr/> 402	<hr/> 1,720*

*including 7 deaths in Scilly Isles.

Number of Deaths at Different Periods of Life

Age Group				Male	Female	Total
0—1 ... ..	...	...	...	78	67	145
1—5 ... ..	...	...	...	16	21	37
5—15 ... ..	...	...	...	15	9	24
15—45 ... ..	...	...	...	150	109	259
45—65 ... ..	...	...	...	1,113	1,018	2,131
Over 65 ... ..	...	...	...	873	1,202	2,075
Total ... ..	...	...	...	<hr/>2,245	<hr/> 2,426	<hr/> 4,671*

*Including 15 deaths in the Scilly Isles.

The following table shows the number of deaths which occurred in the various age-groups out of every 1,000 deaths which occurred in the County in the years 1900 and 1950:—

1900		1950
186	Under 1 year of age	31
63	Ages 1 year to 5 years	8
33	„ 5 years to 15 years	5
46	„ 15 „ „ 25 „	11
290	„ 25 „ „ 65 „	239
381	„ 65 „ and over	705

A complete list of deaths from all causes, in age groups, is shown in Table V at the end of this Report.

Comparative Rates

	Cornwall		England and Wales
	1949	1950	1950
Live births, rate per 1,000 of the population	15.41	13.99	15.8
Stillbirths, rate per 1,000 of the population	0.38	0.37	0.37
Deaths from all causes, rate per 1,000 of the population	14.10	13.69	11.6
Deaths under 1 year of age:—			
All infants per 1,000 live births ...	32.24	30.26	29.8
Legitimate infants per 1,000 legitimate live births	32.48	29.27	—
Illegitimate infants per 1,000 illegitimate live births	28.17	48.18	—
Deaths from enteritis and diarrhoea under 2 years of age per 1,000 live births	1.18	1.47	1.9
Deaths from Enteric Fever per 1,000 population	0.00	0.000	0.00
Deaths from Whooping Cough per 1,000 population	0.003	0.003	0.01
Deaths from Diphtheria per 1,000 population	0.003	0.003	0.00
Deaths from Influenza per 1,000 population	0.15	0.127	0.10
Deaths from Tuberculosis per 1,000 population	0.45	0.38	0.36
Maternal Mortality per 1,000 total births	0.38	1.64	0.86

NATIONAL HEALTH SERVICE ACT, 1946.

ADMINISTRATION.

The administrative structure described in some detail in my Annual Report for the year 1948 has continued to function smoothly. The areas into which the County has been divided remain as follows:—

Area No.	Area Office address.	Sanitary Districts	Area in Acres.	Estd. Population.
1	1, North Parade, Penzance.	Penzance M.B.	3,155	1950
		St. Ives M.B.	4,287	20,210
		St. Just U.D.	7,634	8,720
		West Penwith R.D.	59,792	4,093
			<hr/> 74,868	<hr/> 17,740
2	Station Hill, Redruth.	Helston M.B.	4,014	5,220
		Camborne-Redruth U.D.	22,062	35,800
		Kerrier R.D.	90,839	21,360
			<hr/> 116,915	<hr/> 62,380
3	14/15 Boscawen Street, Truro	Falmouth M.B.	1,880	16,900
		Penryn M.B.	829	4,103
		Truro City	2,634	13,080
		Truro R.D.	108,316	27,370
			<hr/> 113,659	<hr/> 61,453
4	34a Fore Street St. Austell.	Fowey M.B.	2,979	2,198
		Lostwithiel M.B.	3,156	2,092
		Newquay U.D.	4,599	9,850
		St. Austell U.D.	18,379	23,800
		St. Austell R.D.	82,389	20,410
			<hr/> 111,502	<hr/> 58,350
5	Hill Road, Wadebridge.	Bodmin M.B.	3,312	6,545
		Padstow U.D.	3,343	2,560
		Wadebridge R.D.	88,230	16,060
			<hr/> 94,885	<hr/> 25,165
6	Castle Green, Launceston.	Launceston M.B.	2,182	4,624
		Bude-Stratton U.D.	4,294	5,286
		Camelford R.D.	52,544	7,415
		Launceston R.D.	73,051	6,500
		Stratton R.D.	56,285	5,577
			<hr/> 188,356	<hr/> 29,402

Area No.	Area Office address.	Sanitary Districts	Area in Acres.	Estd. Population.
7	Westbourne Liskeard.	Liskeard M.B.	2,704	4,340
		Saltash M.B.	5,335	7,570
		Looe U.D.	1,691	3,714
		Torpoint U.D.	975	6,952
		St. Germans R.D.	48,433	15,700
		Liskeard R.D.	104,803	14,210
			<hr/>	<hr/>
			163,941	52,486

The day to day administration of all the Services administered by the Health Committee under the National Health Service Act, 1946, with the exception of the Mental Health Service, has been passed to each of the seven Area Health Sub-Committees for consideration and report. The experience of a further year has shown how valuable it is to secure the local knowledge of members of Borough and District Councils and Voluntary Associations in the detailed administration of these Services which now form so intimate a part of the life of the people in this County.

As far as the other two Authorities responsible for the administration of sister Services under the Act are concerned, it is encouraging to be able to report a continuing cordial relationship maintained with the Regional Hospital Board and the Executive Council for Cornwall. On the Hospital side, we are more largely concerned with the West Cornwall Hospital Management Committee and its Officers, with whom there has been ample opportunity for friction but none taken. A sense of unity of purpose seems to pervade the whole of the Health Services in spite of the various pieces into which it has been split for the operation of this Act.

CARE OF MOTHERS AND YOUNG CHILDREN

Under Section 22 of the National Health Service Act, 1946, the County Council has a duty to provide a service for the care of expectant and nursing mothers and young children.

The Act has been in force for well over 2 years. Apart from the lack of the routine ante-natal clinics, which were anticipated in the proposals, the service progresses satisfactorily. There are 7 Midwives' clinics in the County, new clinics having been opened at Bude, Launceston, and Wadebridge during the year. These clinics are essentially educational and classes and discussions in parentcraft are held at them. All pregnant women are entitled to ante-natal care and supervision by their own medical advisers.

Consulting ante-natal clinics are provided by the Regional Hospital Board. Patients who are to be admitted to hospital for their confinements, either for medical or social reasons, attend these clinics, of which there are 9 in the County.

Maternity Accommodation

This is provided by the Regional Hospital Board. During the year the Trebarras Maternity Home at Liskeard was taken over by the Regional Hospital Board for the accommodation of maternity patients whose homes are unsuitable for domiciliary confinement. These patients are admitted on the recommendation of the County Medical Officer.

During the year 31 social cases were referred to Redruth Hospital, 165 to the Alexandra Maternity Home, Plymouth, 10 to the West Cornwall Hospital, Penzance, and 52 to Trebarras Maternity Home. No cases recommended were refused admission.

Maternity Outfits

For patients who are confined at home sterilised maternity outfits are provided free of charge. These outfits are distributed by the midwives or by the Health Area Offices.

Rosemundy Home, St. Agnes. This Home is maintained by the Cornwall Social and Moral Welfare Association, subsidised by a grant from the County Council. There is accommodation for 24 unmarried mothers and their babies. Each patient stays in the Home about 6 months (2 months before confinement and 4 months after). 42 cases were admitted during the year, and 35 babies were born in the Home.

County Day Nursery

This Nursery at Newquay has accommodation for 45 children aged 2—5 years. Priority is given to those children whose mothers, for social reasons, are forced to work, and so are unable to care for their children during the day.

78 Children were admitted during the year, the average attendance being 38, and the maximum 48.

With the raising of school leaving age, the increased demand on the accommodation in schools prohibits the admission of children until the term after they have reached their fifth birthday. We are frequently requested to cater for these children in the nursery until there is a vacancy for them in school. This is unsatisfactory as after 4½—5 the children are too old for the amenities of a day nursery, and their continued attendance prevents the admission of younger children.

Puerperal Pyrexia. 59 cases of puerperal pyrexia were notified during the year. Of these 39 were confined in Institutions and 20 in their own homes.

Ophthalmia Neonatorum. There were only 2 cases of Ophthalmia Neonatorum notified. In both vision was unimpaired.

The number of cases per 1,000 live births in recent years is as follows:—

Year		Total cases	No. per 1,000 live births
1945	...	12	2.7
1946	...	7	1.4
1947	...	7	1.3
1948	...	6	1.1
1949	...	6	1.2
1950	...	2	0.4

Maternal Mortality

There were 8 deaths associated with childbearing. Of these 4 were due to haemorrhage (2 ante-partum haemorrhage combined with toxæmia, and 2 post-partum haemorrhage); one each due to toxæmia, obstetric shock, air embolism following abortion, and abortion in a severe case of tuberculosis. In only three patients was their previous health reported good. All the confinements were abnormal, and only one had adequate ante-natal care. In two cases the patient was definitely unco-operative and refused admission to hospital when this was advised. The ages of the mothers ranged from 19 to 35 years. In four instances it was a first pregnancy.

The Maternal Mortality calculated per 1000 total births is 1.64 compared with 0.38 in 1949. The rates for particular years are very variable owing to the comparatively small number of births. The following are the rates per 1000 births for recent five year periods:—

1931—35	...	4.47
1936—40	...	3.59
1941—45	...	3.06
1946—50	...	1.37

The quinquennial rates show how the maternal mortality in Cornwall is falling. This can be attributed to several factors including better training of midwives; better hospital accommodation; better ante-natal care and education of patients; improved methods of treatment such as blood and plasma transfusions, and the use of antibiotics (penicillin and sulphanilamide drugs). It is interesting to note that there have been no deaths from puerperal sepsis in the County since 1947.

Arrangements have been made with the Hospital Management Committee to have the blood of every expectant mother typed into A.B.O. and rhesus groups. If it should be necessary to give a blood transfusion this can be done without delay. It also economises the use of the rare rhesus negative blood which can be saved for rhesus negative women. If the type of the patient's blood is unknown it is essential that she be given this rare blood, whereas 85% could have been given rhesus positive blood which is much more plentiful. This typing of the blood also indicates which women should be kept under observation, lest they later develop antibodies which might affect the baby and necessitate a replacement transfusion after it is born.

A flying squad to give immediate blood transfusion to patients in their own homes is available when called by a doctor, or by a midwife if a doctor is not available.

Infant Mortality.

The number of babies who died in 1950 during their first year of life was 144 giving a rate of 30.26 per 1,000 live births, as compared with 37.24 in 1949.

The following are the Infant Mortality rates per 1,000 live births for a number of years:—

				Cornwall	England & Wales
1898	...	...	...	156.24	160
1900	...	...	...	126.19	154
1910	...	...	...	85.44	105
1920	...	...	...	59.50	80
1930	...	...	...	51.27	60
1940	...	...	...	48.26	55
1941	...	...	...	52.46	59
1942	...	...	...	46.09	49
1943	...	...	...	35.81	49
1944	...	...	...	40.72	46
1945	...	...	...	36.67	46
1946	...	...	...	38.75	43
1947	...	...	...	34.85	41
1948	...	...	...	34.54	34
1949	...	...	...	32.24	32
1950	...	...	...	30.26	30

The quinquennial rates for recent years are:—

1931—35	...	52.94
1936—40	..	51.56
1941—45	...	42.35
1946—50	...	34.13

Investigations were made into these 144 deaths. It was found that 105 were neo-natal deaths, that is babies who had died during the first four weeks of life, giving a neo-natal death rate of 22.06. The causes of neo-natal deaths were as follows:—

Prematurity only	...	39
Congenital Malformation	...	12 (including 6 premature)
Difficult labour and birth injury	...	20 (including 6 premature)
Asphyxia and Atelectasis	...	11 (including 5 premature)
Rhesus incompatibility	...	7 (including 1 premature)
Broncho pneumonia	...	12 (including 5 premature)
Gastro Enteritis	...	2
Other illnesses	...	2

The majority of neo-natal deaths and stillbirths result from prematurity, congenital malformation, difficult confinements, maternal toxæmia and other causes operating before birth. This shows the need for adequate and continuous antenatal care from the early months of pregnancy. In 10 cases of infant deaths, and in 12 stillbirths the mother had no antenatal care.

It is considered that inadequate diet has an adverse effect on the developing foetus and on the mother's health. Because of this expectant mothers are granted extra rations and vitamins. While the majority of women buy the extra rations, we do not know whether they take them themselves or divide them among the family fare. The take-up of vitamin tablets is only 37% of the expectant mothers entitled to them. This is an instance where further education is needed, and the reasons for taking her vitamins and extra rations should be explained to every expectant mother by her midwife,

Closely linked with the causes of neo-natal deaths are the stillbirths. In 1950 there were 125 stillbirths. A child is stillborn when it has issued forth from its mother after the 28th week of pregnancy, and has not at any time after being completely expelled from its mother, breathed or shown any other signs of life. On investigation it was found that 2 of these cases were under 28 weeks gestation and should not have been notified as stillbirths.

The causes of stillbirths were:—

Prematurity only	...	19
Congenital malformation	...	15 (including 6 premature)
Difficult labour and birth injury	...	18 (including 1 premature)
Asphyxia and Atelectasis	...	7
Rhesus incompatibility	...	6 (including 2 premature)
Maternal toxæmia	...	30 (including 20 premature)
Ante partum hæmorrhage	...	13 (including 9 premature)
Macerated	...	12 (including 3 premature)
Unknown	...	5

60 of these stillbirths were premature.

There were 39 deaths of children aged 1 month to 1 year. After the neonatal period when the infant has survived the hazards of prematurity and birth trauma most deaths are due to infection—particularly infection of the respiratory tract. The following table gives the cause of death between 1 and 12 months in 3 months age periods.

Infant deaths between 1 and 12 months.

Cause of death	Age at death in months				Total	
	1-3	4-6	7-9	10-12		
Congenital Malformation	...	1	1	—	2	
Infection	...	2	—	1	4	
Gastro Enteritis	...	—	2	1	5	
Accidental	...	1	—	—	2	3
Bronchitis and Broncho Pneumonia	...	8	7	6	2	23
Others	...	2	—	—	—	2
Total	...	14	10	8	7	39

In 1900 the infant death rate in Cornwall was 126. The steady reduction during the past 50 years to 30.26 reflects credit on all who have worked in Infant Welfare. Better housing, cleaner and safer milk, better knowledge of mother craft, smaller families so that the mother can devote more attention to the baby, better paved less dusty and cleaner roads, have all helped in this saving of infant lives.

Among the 144 infant deaths 19 were twins. Of these, in 8 cases both twins died (16), in one the twin was stillborn, and in 2 the twin survived.

9 of the stillbirths occurred in twins. In one case both babies were still-born (2, in one the twin died in infancy, and in 6 cases the twin survived.

The following tables show the incidence of stillbirths and neo-natal deaths:—

		No.	Premature	Full Term	% Premature
Stillbirths	...	125	60	65	48.0%
Neonatal Deaths	...	105	62	43	59 %
Total	...	230	122	108	53 %

The decline in the death rate of infants in the neo-natal period has been slower than that of infants between 1 and 12 months. More than half these neo-natal deaths occurred in premature babies. 6.8 per cent of the babies born in the County in 1950 were premature.

Degree of Prematurity and length of survival of 62 neo-natal deaths in premature infants.

Length of Pregnancy		Age at death			Total	% deaths under 24 hours
		Under 24 hours	1-7 days	8-28 days		
Under 28 weeks	...	7	—	—	7	6.6
28—31 weeks	...	23	7	—	30	21.9
32—35 weeks	...	10	5	—	15	9.5
36—39 weeks	...	5	4	1	10	4.76
Total Premature	...	45	16	1	62	42.85
Full-term Neonatal	...	13	19	11	43	12.38
Total Neonatal	...	58	35	12	105	55.2

From the above table it will be seen that in 62 neo-natal deaths in premature infants only one survived the first week. 29 of these 62 deaths were due to prematurity only. In the other 33 prematurity was associated with some other cause (see the following table).

Causes of 125 stillbirths and 105 neo-natal deaths.

Cause		Stillbirth		Neonatal death		Total
		Premature	Full Term	Premature	Full Term	
Not known	...	—	5	—	—	5
Prematurity only	...	18	—	29	—	47
Congenital Malformation	...	6	9	6	6	27
Difficult labour	...	—	14	1	—	15
Birth injury	...	—	2	3	14	19
Asphyxia and Atelectasis	...	—	6	5	6	17
Rhesus incompatibility	...	2	4	1	6	13
Broncho-pneumonia	...	—	—	5	7	12
Gastro-enteritis	...	—	—	—	2	2
Macerated	...	4	9	—	—	13
Maternal toxæmia	...	20	10	4	—	34
Ante-partum Haemorrhage	...	9	4	6	—	19
Other illnesses	...	—	—	—	2	2
B.B.A.	...	1	2	2	—	5
Total	...	60	65	62	43	230
		125		105		

30 stillbirths (24%) were associated with maternal toxæmia.

48% of the stillbirths were premature.

59% of the neo-natal deaths were premature.

Percentage distribution by cause of 125 stillbirths and 105 neonatal deaths.

Cause		Stillbirth	Neonatal death	Total
		%	%	%
Not known or prematurity only	...	18.2	27.4	22.8
Congenital malformation	...	12.0	11.4	11.7
Hazards of birth	...	12.8	17.1	14.9
Maternal toxæmia and hæmorrhage		34.2	9.5	21.8
Other illnesses	...	—	1.9	0.9
Rhesus incompatibility	...	4.8	6.7	5.7
Infection	...	—	13.2	6.6
Other causes	...	17.5	12.4	14.9

Parity

Parity		Stillbirths	Neonatal deaths		Total
			Premature	Full-term	
1st Pregnancy	...	44	26	20	90
2nd—4th Pregnancy	...	60	27	19	106
5th or more Pregnancies	...	21	9	4	34
Total	...	125	62	43	230

39 per cent of the stillbirths and neonatal deaths occurred in first confinements

Child Welfare Centres

There are 38 Child Welfare Clinics maintained by the County Council. The Clinic at Callington was closed owing to insufficient attendances. A new clinic was opened at Albaston.

99 sessions per month are held at these clinics, 4,082 children attended during the year making a total number of attendances of 24,962.

No of children under 1 year who attended for the first time	1,749
No. of children aged 1—5 years who attended for the first time	498
Total attendances under 1 year	...
Total attendances 1—5 years	...
	16,726
	8,236

These clinics are staffed by Assistant School Medical Officers, Health Visitors and District Nurses. In many centres valuable help is given by voluntary workers. This continued interest and assistance is much appreciated.

Clinics are set up in towns and populous areas. In rural districts a service is provided by qualified Health Visitors, who visit homes where there are children under school age.

The aims of a Child Welfare Centre are threefold:—

1. Teaching parentcraft to instruct mothers in the care and feeding of infants and young children.

2. To supervise the progress of young children and prevent, as far as possible, unnecessary illness due to ignorance of their mothers.
3. To assist in restoring the mother to health, and in establishing natural breast feeding.

Treatment is not given at these Centres, and they do not take the place of a hospital or private doctor's consultation. A busy practitioner cannot always spare time for the supervision of the development and nutrition of a healthy child, and the education of its mother. The value of the mother's attendance at a Centre is increased by follow-up visits to her home by a health visitor, who makes sure that the doctor's advice has been understood, and that the directions given are followed correctly. Further explanation is given in the home when necessary.

Centres are used to further Health Education. Attractive posters are displayed and pamphlets distributed. Talks and demonstrations are given at each session. Appropriate films have been shown at many Centres. These have been much appreciated by the audiences, who find these visual aids interesting and helpful in their personal problems.

Centres provided by voluntary organisations continue at St. Mawes and Portscatho. 101 children attended these clinics, making 358 attendances.

THE NURSING SERVICES

The re-organisation of the Nursing Services made under the National Health Service Act has effected an economy in District Nurse-Midwives. This service has proved satisfactory. By providing Nurses with a telephone and car it is unnecessary to establish a Nurse in every village, and with a larger district she has sufficient work to keep in practice and maintain her efficiency.

The County Nursing Association still retains responsibility for housing and transporting nurses, and befriending them when they take up duty in a new community. The administrative machinery set up by the County Nursing Association is parallel to that of the Health Committee consisting as it does of a central organisation with seven Area Committees. The arrangement has proved as effective as had been hoped and the value of voluntary service has once again been demonstrated in this most important ancillary to the more formal arrangements provided by the Local Health Authority.

REPORT OF THE COUNTY NURSING OFFICER.

It now seems a long time since July 1948, and the Nursing Service has become an integral part of the Health Service of the Local Authority. Staffing the county has at times been a little difficult, but because of the close co-operation between all members of the staff, it has been possible to maintain a satisfactory Service. The monthly staff meetings in each Area have become an institution. Health visitors and nurses who at one time hardly knew their next door neighbours, now look forward to meeting and exchanging their views. This getting together has fostered a feeling of unity, making administration of the Service much more flexible. Another factor which has helped to maintain and improve the quality of the staff is the

award of scholarships to State Registered nurses to enable them to take various trainings for additional qualifications, in return for which they agree to give a period of service to the county. At the present time we have on our staff 42 nurses recruited in this way; 11 of them have completed their training during the past year.

Housing

The housing of our staff is still far from satisfactory, but it would not be right to say there has been no improvement. We are most grateful to some of the local Housing Authorities for their help in allocating houses for the use of district nurse-midwives.

Gas and Air Analgesia

During the year we have been able to send 35 midwives away for training in the administration of Gas and Air Analgesia, and every midwife who is eligible is now qualified. Approximately 78% of the domiciliary midwifery cases being attended by our midwives are having Gas and Air Analgesia.

Post-Certificate Education

During the year 27 members of the staff have attended refresher courses on various subjects as follows:—

Health visiting	...	4	Home nursing	...	2
Midwifery	...	17	Administration	...	4

Another means of education is the Staff Reference Library, which now has nearly 400 books.

Nurses employed on 31st December, 1950:—

Administrative staff

County Nursing Officer	...	...	...	...	...	1
Deputy County Nursing Officer	..	...	...	...	...	1
Assistant County Nursing Officers	...	...	...	...	...	4

District Nurse-Midwives

"Queen's" Nursing Sisters, S.R.N., S.C.M., Health						
Visitor's Certificate	...	...	...	...	...	18
"Queen's" Nursing Sisters, S.R.N., S.C.M.	...	...	...	...	...	39
State Registered Nurses, S.C.M.	...	...	...	...	...	23
State Certified Midwives, S.E.A.N.	...	...	...	...	...	43

District Nurses

"Queen's" Nursing Sister, S.R.N. only	...	...	...	...	...	1
State Enrolled Assistant Nurse	...	...	...	...	...	1

Health Visitors

State Registered Nurses, S.C.M., Health Visitor's						
Certificate	...	..	...	...	...	24

Patients Attended by Nurse-Midwives

New Patients	...	...	...	...	...	...	...	14,608
Surgical Cases	...	...	...	...	...	...	3,622	
Medical Cases	...	...	...	...	...	...	8,078	
Midwifery Cases	...	...	...	...	...	...	1,906	
Maternity Cases	...	...	...	...	...	...	759	
Miscarriages	...	...	...	...	...	...	243	

Work Done by Nurse-Midwives

General Nursing Visits	...	...	...	...	...	...	176,122
Midwifery and Maternity Cases Visits	...	...	...	...	...	...	50,783
Casual Visits	...	...	...	...	...	...	18,962
Ante-natal Visits	...	...	...	...	...	...	23,785
Attendances at Operations	...	...	...	...	...	...	90
Nights on duty	...	...	...	...	...	...	2,688

Maternity and Child Welfare Work

	Full Time H.V's.	Part Time H.V's.	Adminis- trative staff	Totals
Visits to children under 1 year	19,962	24,020	—	43,982
Visits to children aged 1-5 years	31,357	30,314	—	61,671
Child Welfare Centres attended	1,225	1,360	116	2,701
First visits to Expectant Mothers	54	—	385	439
Total visits to Expectant Mothers	112	—	385	497
Ante-natal Clinics attended	138	—	23	161
Child Life Protection—				
First visits	30	—	36	66
Re-visits	116	—	—	116
Lectures given	199	—	23	222

School Work

Attendances at Minor Ailment Clinics	...	...	...	1,013	—	—	1,013
Attendances at School Medical Inspections	...	...	...	394	362	—	756
Attendances at School Cleanliness Inspections	...	...	...	950	2,194	—	3,144
Follow-up visits	...	...	...	4,074	1,449	—	5,523

Tuberculosis

First visits to Patients' Homes	...	743	—	40	783
Re-visits to Patients' Homes	...	7,931	—	—	7,931
Clinics attended	...	671	—	17	688

REPORT OF THE COUNTY NURSING OFFICER AS STATUTORY NON MEDICAL SUPERVISOR OF MIDWIVES.

Midwives practising on 31st December, 1950:—

Domiciliary Cornwall County Council:

"Queen's" Nursing Sisters, S.R.N., S.C.M., H.V.Cert.	...	...	...	...	18
"Queen's" Nursing Sisters, S.R.N., S.C.M.	..	...	...	...	39
State Registered Nurse, S.C.M., H.V.Cert.	...	...	...	...	1
State Registered Nurses, S.C.M.	...	...	...	...	22
State Certified Midwives	...	...	...	...	43
					<hr/>
					123
Domiciliary in Private Practice	...	...	...	...	15
In Nursing Homes	...	...	...	...	23
					<hr/>
					161
					<hr/>

Cases attended by above Midwives:—

	As Midwives	As Maternity Nurses	Totals
Cornwall County Council	1,906	759	2,665
Independent Midwives and in Nursing Homes	246	354	600
		<hr/>	<hr/>
		2,152	3,265
		<hr/>	<hr/>

Notifications received of:—

Stillbirths	...	...	...	...	125
Deaths of Mothers	...	...	...	...	3
Infant deaths	...	...	...	...	98
Artificial feeding	...	...	...	...	458
Liability to be Source of Infection	...	...	...	...	78
Sending for Medical Aid	...	...	...	...	529

Medical Aid forms sent in respect of:—

Mother during Ante-natal period	...	...	73
Mother during Labour	...	...	301
Mother during Puerperium	...	...	85
Infant	...	...	70

Work of Supervisor and Assistants:—

Regular Inspections of Midwives and Nurses	...	...	...	423
Other visits to Nurses	...	...	...	584
Special visits of Enquiry	...	...	...	483
Inspections of Nursing Homes	...	...	...	56
Inspections of Old Persons Homes	...	...	...	30

NURSERIES AND CHILD-MINDERS REGULATION ACT, 1948

This Act provides for the registration and inspection of private day nurseries where children are cared for by the day for a period not exceeding 6 days, and also for persons who for reward receive into their homes children under the age of 5 to be looked after by the day for a period not exceeding 6 days.

The Council has approved the registration of one Day Nursery, having accommodation for 12 children.

10 children under 5 years were admitted during the year. There were no new registrations in 1950.

NURSING HOMES

Nursing Homes are still administered under the Public Health Act, 1936

During 1950, there were no new applications received by the County Council. Four Homes were closed, and one was transferred to the Regional Hospital Board for maternity accommodation for social cases. At the end of the year there were 16 Nursing Homes on the register, with 62 maternity beds (including 24 at Rosemundy) and 84 beds for other cases. 576 babies (including 35 in Rosemundy) were born in Nursing Homes.

DISABLED AND OLD PERSONS' HOMES

Sections 37—40 of the National Assistance Act, 1948, came into force in November 1949. This Act provides for the registration and inspection of Homes which accommodate the aged, or persons who are blind, deaf and dumb, or other persons who are substantially and permanently handicapped, by illness, injury, or congenital deformity. During 1950, one Home for the Blind with 21 beds, and 10 Homes with total accommodation for 174 old persons were registered under this Act.

HOME HELP SERVICE

The Home Help Service established under Section 29 of the National Health Service Act has been running for over 2 years. The value of this service is proved by an ever increasing demand. The Women's Voluntary Service continue to operate the scheme, each district having a local organiser, who is responsible to the Area Health Sub-Committee and its Medical Officer for the Home Help Service in her district.

Local organisers deal with as many cases as possible with their existing staff. When it is shown that there is a real need for more help, the establishment of Home Helps is increased.

This service has been extended to cover practically the whole county. There is a panel of resident Home Helps to serve exceptionally remote householders. Each application is judged by medical need only and Home Helps are available on the written recommendation of a doctor, nurse or responsible officer. Priority is given to maternity cases, temporary illness in active women (especially where there are children), illness and infirmity in old people and other cases.

During the year the service was extended to benefit patients suffering from tuberculosis. Home Helps sent to these households are carefully supervised, and periodically x-rayed.

The Home Help carries out the ordinary domestic work of the housewife such as cleaning, cooking, mending, shopping, caring for children, but is not required to do arrears of washing and housework. Her duties should never infringe upon nor interfere with those of the midwife or nurse when one is in attendance. Home Helps are not sent into homes where infectious disease is present without her consent, and that of the Medical Officer of Health.

Payment for the Home Help is recovered from the applicant wholly or in part according to the family income.

In 1950, fifty whole time and 64 part time home helps were employed and attended 772 households, compared with 718 in 1949, and 200 in 1948. These include 6 resident Home Helps to serve isolated dwellings. In addition each area has a panel of spare-time Home Helps who can be called upon in an emergency. Without this service many more people would need hospital accommodation and their children would be sent to Children's Homes.

		Number of Domestic Helps employed :			Number of cases served :		
		Whole time	Part time	Spare time	Maternity	Tuberculosis	Others
Area No. 1	...	8	5	1	32	2	70
Area No. 2	...	12	4	1	49	2	79
Area No. 3	...	15	3	2	57	9	147
Area No. 4	...	6	2	13	56	3	97
Area No. 5	...	1	2	3	20	1	16
Area No. 6	...	4	7	Nil	15	1	13
Area No. 7	...	Nil	4	15	16	1	35
County Panel	...	4	Nil	2	39	Nil	12
Grand Total	...	50	27	37	284	19	469

I should like to express my thanks to Lady Carew Pole, (the Women's Voluntary Service County Organiser), and the Women's Voluntary Service for their excellent work undertaken on behalf of the County Council; and also to those District Councils who continue to co-operate in this scheme.

DENTAL SERVICE

REPORT OF THE CHIEF DENTAL OFFICER.

Mr. K. Batten, the Chief Dental Officer reports as follows:—

Because the same staff operates both portions of the Dental Service provided by the County Council for the priority classes, this report is presented under two headings.

1. School Dental Service (Education Act, 1944).
2. Mothers and Young Children's Dental Service (National Health Service Act, 1946).

Staffing.

Whilst prevailing conditions have made it impossible to attract any new Dental Officers and so allow the staff to be brought up to strength, luckily no more Dental Officers have resigned during the year, and the present staff consists of 1 Chief Dental Officer, 6 Assistant Dental Officers, 9 Dental Attendants, 1 dental technician, 1 dental apprentice. One dental attendant (Mrs. Good) resigned during the year.

In addition to shortage of staff, this year's work has been seriously interfered with because there has been an unusual amount of absence through sickness among the Dental Officers, resulting in a loss of 390 sessions for this reason alone, which reduced the staff available during the year to the equivalent of 1 Chief Dental Officer and $4\frac{1}{2}$ Assistant whole time Dental Officers.

It is a regrettable fact that for many years the only applications from dentists have come from people well over 50 years of age, in one case 75, and only one of these had had any experience in the inspection and treatment of school children. This total lack of young recruits over such a long period must result in serious results to the School Dental Service even if negotiations now taking place result in staff recruitment.

Dental Centres

During the year under review much progress has been made in the provision of additional surgery accommodation; fully equipped dental centres have been opened up and brought into operation in Launceston, Bodmin, Wadebridge, Penryn, Redruth, Saltash and Callington, and the one at Torpoint is completed and will be brought into use early next year. These centres are in addition to those previously existing at Penzance, Camborne, Falmouth and Truro.

Centres of a temporary nature have also been set up and used in Hayle, Helston and Newquay. In his annual report the Assistant Dental Officer working the dental districts of Wadebridge and Newquay makes the following observations, "I feel that the Clinics at Bodmin and Wadebridge are appreciated by the parents and children, I wish I could say the same for Newquay, I think these children should have similar facilities for treatment. Accommodation is the drawback and I do hope in the future we shall be able to overcome this." (This comes from a Dental Officer who has since 1931 spent all his time working in schools and village halls and until this year has never had the privilege of working in a well equipped dental centre).

By visiting these dental centres and treating the children there on specified days each week, much time has been saved because Assistant Dental Officers have not had to travel from one small school to another setting up and dismantling equipment; all too frequently the only room available to the Dentist is also required for school dinners. When staff does become available again it will be advantageous in that they will be able to commence duties at once in these centres instead of kicking their heels, so to speak, whilst awaiting the setting up of centres and the purchase of equipment as has happened in the past.

Inspection and Treatment.

During the year, 2,596 sessions have been devoted to inspection and treatment of children attending Primary, Secondary, Technical and Nursery schools, this being the equivalent of $5\frac{1}{2}$ whole time Officers. But out of a total school population of 42,136 for which the Service is responsible, it was only possible to give dental examination to 17,728. Of these, 13,235 were found to require treatment and 8,008 actually attended and were treated, making 13,708 attendances.

Owing to sickness and other reasons 2,278 appointments were not kept and no cancellation sent by the parents, and as a specified time is allocated to each patient this resulted in much loss of time.

The treatment provided included the filling of 7,510 permanent teeth and 795 temporary teeth, the extraction of 1,442 permanent teeth and 4,987 temporary teeth (259 of the permanent were extracted for orthodontic reasons and not because of caries). The amount of treatment performed per 100 children was:—

Fillings		Extractions		Other Operations	
Perm. teeth	Temp. teeth	Perm. teeth	Temp. teeth	Perm. teeth	Temp. teeth
90	10	18	62	97	43

When compared with last year's figures, a decrease in the number of fillings but an increase in the number of extractions is shown. The acceptance rate for dental treatment has been 61% and is a decrease of 9% on last year. Both of the foregoing facts are explained by the complete breakdown in some dental districts, and the too long intervals between routine visits to carry out dental inspection and treatment, in other districts.

Other operations were carried out for 7,818 permanent teeth and 3,490 temporary ones; included under these headings are root fillings, crowns and inlays, dressings, impressions and try-ins and easing of dentures, also adjustments to orthodontic appliances and the treatment of temporary teeth by silver nitrate.

The following table shows the average amount of work carried out by the Dental Officers in Cornwall during the year, as against that done during the previous year by Dental Officers in a large town.

				Cornwall	Large Town 1949
No. Inspected	...	...	...	3,223	4,426
„ Referred	...	...	...	2,628	2,287
„ Treated	...	...	...	1,456	1,376
Attendances	...	...	...	2,492	2,863
Fillings (permanent)	...	...	...	1,365	1,138
„ (temporary)	...	...	...	144	278
Extractions (permanent)	...	...	...	262	509
„ (temporary)	...	...	...	906	2,732
Orthodontic operations (permanent & temporary)	...	...	...	2,056	485

Orthodontia

The amount of irregularities and malocclusion of the teeth does not decrease and the demand for orthodontic treatment continues to increase and is very much greater than can be met. Applications have been received not only from parents, teachers and children themselves, but also from School Doctors, speech therapists and private dental and medical practitioners and therefore the waiting list is all too long. This is not at all a new feature, as in my Annual Report to the City of Bath Education Committee for the year 1913, I made the following remark, "Again a number of irregularities of teeth were met with and these I am sorry to say it is impossible, under the present conditions of the scheme, to treat, unless it is a case that can be put right by extraction. But I hope the time will come when all these defects can be properly treated."

The Assistant Dental Officer for the Liskeard and Saltash-Torpoint districts remarks in his annual report "I do not think it is an exaggeration to put the proportion of children needing orthodontic treatment as high as

1 in 10. A limited amount of this type of work is undertaken and can be increased now that the clinics are available."

It has been found most unsatisfactory to undertake any orthodontic treatment needing appliances when it is impossible for the children to attend at centres regularly for adjustments.

It was found possible to continue the treatment of 130 cases commenced in previous years and in addition treatment was started on 139 new cases.

The orthodontic treatment by appliances, of 47 children was satisfactorily completed but it was found expedient, for various reasons, to discontinue treatment of 56 children. The Assistant Dental Officer for Penryn-Falmouth states "Orthodontic cases are satisfactory this year and there are one or two classes of treatment upon which I would appreciate a consultation. As you will observe, several treatments have been discontinued owing to the parents' lack of interest and non co-operation."

At the moment it has been found advisable to make use in the main of removable appliances. 125 cases were treated by extractions only.

Since the initiation of the National Health Service Act the Eastman Clinic is no longer acting as consultants to this County, and I have acted in that capacity myself, giving advice whenever necessary and supervising all the orthodontic treatment undertaken. A central dental laboratory at headquarters simplifies this, and the same applies to the construction of dentures.

Dental Laboratory

The dental laboratory continued to be fully occupied, the work done for school children being shown in the following table:—

Orthodontic Appliances (Removable)	...	...	302
Record and Study Models	...	...	454
Partial Dentures	...	...	48
Dentures Repaired	...	...	19
Crowns and Inlays	...	...	9

The dental apprentice appointed in September, 1948, continues to make satisfactory progress and is able to be of assistance to the dental technician. In order that a too lengthy break shall not occur between apprentices, on my advice it has been agreed to appoint another apprentice early in 1951.

General Anaesthetics

Administrations have been carried out at the Truro, Falmouth, Penzance and Redruth dental centres during 47 sessions for 434 patients; all of these have been administered by myself.

This is a service that is becoming much in demand and is a very necessary one, but it can only be brought into use as the dental centres come into being.

In the "Health of the School Child" (1937) the Chief Medical Officer of the Board of Education remarks, "The Board have consistently urged that general anaesthetic facilities should be available in all school dental schemes. It is a poor advertisement for the school dental service if the

members of the staff have to recommend that this form of treatment should be obtained elsewhere, e.g. in hospital. In these circumstances, parents are likely to regard the dental clinic as capable of dealing only with the simpler manifestations of dental disease."

In the "Health of the School Child" for the years 1946 and 1947 the Chief Medical Officer of the Ministry of Education remarks "As compared with the period immediately before the war, there has been a striking increase in the use of oxygen combined with nitrous oxide for general anaesthesia in school dentistry. Many authorities have provided one or more of the various excellent machines now available which are designed to deliver a flow of accurately mixed gases for maintaining continuous anaesthesia by the nasal route. It is unfortunate that in a number of instances dental officers have failed to take advantage of the benefits of this method and have used the new apparatus simply to administer 'single-dose' anaesthesia by means of a face-piece. It is, therefore, suggested that Authorities might arrange for those of their dental officers who are not conversant with nasal anaesthesia technique to obtain practical instruction at a dental school for a brief period, if they so desire. Such a course is justified by the benefit to both patient and dentist of unhurried operating, and of all necessary extractions being completed in most instances at one sitting.

The principle that, except in cases of special urgency, the same officer should not administer a general anaesthetic and also perform the extractions should be strictly observed "

One Assistant Dental Officer states "It is gratifying to know that general anaesthesia is available for the cases who have to be treated by this type of anaesthesia, and to the ones who prefer it, confidence being gained in administering the type of treatment that appeals to the child most."

X-ray

This service is meeting with an increasing demand from Dental Officers who are recognising its usefulness in diagnosis and in checking operative work. During the year 63 children have had 204 skiagrams taken.

In addition to the apparatus at Truro and Falmouth, a new instrument, complete with dark room fittings, has been purchased and is about to be installed in the Liskeard centre—this being of a mobile type, it will be used at various centres, one Dental Officer being deputed to convey and use it, but developing facilities will exist at each 'A' centre or district headquarters dental centre. Several of the dental attendants are now carrying out the developing of x-ray films and have had instruction in the taking of films.

Apprentices Course

In conjunction with a Dental Apprentices Course run by the Dolcoath Technical Institute, a practical dental course in dental mechanics was commenced in September in the dental laboratory. The Technician acts as instructor, and he has already given 42 hours. The course is run on Monday afternoons, 1.45—4.45, and in addition it has been necessary for him to devote 32½ hours to preparation. A certain amount of my own time has had to be devoted to preparation and on getting the course started.

This course has proved so successful that application has been made by the Education Authority for another session; this will have to be an evening

one and will meet the demand made by the extra number of apprentices now applying to enter. The day course was necessary to cope with the boys who live in places that make it impossible for them to travel at night, but the students can be rearranged now into two groups and so fit into the sessions available.

Reports from the Districts

Dental Officer	Dental District	No. of children
W. K. Batten	St. Ives ... Camborne-Redruth Helston	11,088
F. H. Stranger	Penzance ...	3,302
D. A. Patterson	Falmouth-Penryn ...	3,373
K. Batten	Truro Launceston-Bude ... Part of Newquay	7,859
P. W. Eddy	St. Austell ...	4,053
W. H. Ellam	Liskeard Saltash-Torpoint ...	7,409
F. R. Taylor	Wadebridge-Bodmin ... Part of Newquay	5,052

In the Falmouth-Penryn district the Assistant Dental Officer spends $4\frac{1}{2}$ days a week in Falmouth and 1 day in Penryn and in so doing devotes $4\frac{1}{2}$ days to the School Dental Service. This officer does no travelling other than by bus between these two centres and when appointed in October, 1948, he only accepted on condition that he would not have to travel. A similar condition was made by the Assistant Dental Officer for Penzance when he was appointed in September, 1948, and this officer spends all his time in this centre. These 2 centres have a smaller number of children in them than will be found in the mobile districts; even so, they both have a greater number of children than they could possibly deal with annually, the child population of the Falmouth-Penryn and Penzance districts being 3,373 and 3,302 respectively. In addition both these officers have dealt with an appreciable number of mothers and young children. The fact that they do not travel is rather fortunate for these 2 districts because in both a complete tour of inspection and treatment of schools has been possible in $1\frac{1}{2}$ years.

The Dental Officer in charge of the Penryn-Falmouth district in his annual report states "The acceptance rate is satisfactory, being 84% and quite a large number of refusals are found to have attended their family dentist. Pre-school inspections and treatments are up this time and I think we are beginning to awaken a livelier interest in this direction."

The St. Austell dental district, school population 4,053, has been under the care of the same Dental Officer since January, 1946, who in addition to the school children gives dental inspection and treatment, mainly during school holidays to the inmates at The Retreat, St. Columb, at the request of the Regional Hospital Board. To carry out a complete dental inspection and treatment for all the schools in this district has taken two years and this officer makes the following comments in his report "The dental condition of the children is steadily improving, especially among the younger age groups. The number of children requiring treatment in ratio to those

inspected in noticeably decreasing, a proof that regular treatment is making an immense difference to the dental condition and entailing considerably less operating time for each successive visit.

The acceptance rate remains about the same 65—70%, but among the younger age groups in smaller schools it has been as high as 95%.

A number of senior pupils are visiting their family dentists thereby lowering the acceptance rate somewhat.

No further treatment has been carried out for Mothers and Young Children during the current year owing to the lack of suitable accommodation and equipment. It is hoped that in 1951 an up to date clinic will be established in St. Austell thus enabling all branches of my work to be carried out.

Boarded out children and those in Children's Committees' Homes have been inspected every 6 months and any necessary treatment carried out during the school holidays, their dental condition is particularly good."

In the Wadebridge-Bodmin and part of Newquay district, school population 5,052, the acceptance rate has been 60% and it has taken 2 years to give complete inspection and treatment to all schools in the district. The Officer for this area divides his time between clinics in Bodmin, Wadebridge and Newquay and also treats in certain schools difficult of access.

I have described the work done in the smaller districts first and quoted the remarks of the dental officers in charge of them to show that where the number of patients under the care of one dental officer has been kept within reasonable limits, dental conditions have remained fairly satisfactory, although in all those instances the period between treatments is far too long.

I am afraid the remainder of the report is of a rather more gloomy nature.

The two dental districts of Liskeard and Saltash, school population 7,409, have been under the care of one Dental Officer and in his report he states, "This district is practically that of the No. 7 Health Area and of the S.E. Cornwall Education Area, and is staffed by 1 Dental Officer and 1 Dental Attendant, whose duty it is to provide full, comprehensive treatment for the Priority Classes. (N.B. This area formerly had 2 Dental Officers and 2 Dental Attendants to provide simple treatment for school children only).

Dental treatment for Mothers and Young Children is not stressed although none has been refused. Very little work has been done in this field. A demand could easily be stimulated, but it is manifestly impossible for one man to do twice as much as two men previously attempted to do. Any treatment of mothers must obviously be done at the expense of neglecting the children. Mothers are however encouraged to bring their younger children to the clinics at the earliest possible age. 1950 has been noteworthy for the opening of 3 well equipped clinics and the near completion of the fourth." This Officer has made regular weekly visits to those 3 centres and treated the children there, but it has also been necessary for him to give treatment at schools in the more remote parts of the district.

The 3 districts of St. Ives, Camborne-Redruth, and Helston, school population 11,088, have been under the care of one Dental Officer, and in

his annual report he makes the following observations. " The year 1950 has been a very busy one, although not entirely successful; it has been necessary for me to cover a large area, entailing a considerable amount of unpacking and packing of kit, which on many occasions only allowed time for work of a casualty nature to be carried out to the large numbers requesting treatment. Several gas sessions have been held during the year. A few nursing and expectant mothers have been treated and supplied with dentures successfully."

Truro, Launceston and Bude, and Newquay (country) districts, school population 7,859. It has fallen to my lot to be responsible for all the clinical work carried out in these 3 dental districts in addition to my administrative and other duties, and I have found it necessary to give 208 half day sessions of my time to administrative duties.

It is unnecessary to point out the futility of attempting any routine inspections; my hands have been kept more than fully occupied in dealing with those patients, children and mothers who have either requested treatment or been sent from various outside sources. Rather a long waiting list of mothers still exists. I have made visits to Launceston and Bude as frequently as possible in order to deal with cases of an urgent nature and to continue treatment for those Orthodontic cases commenced by the previous Dental Officer for this district. It has been impossible not to take on new cases, but I have kept these to a minimum; it would be all too easy to fill one's whole time with this type of dentistry and still not be able to undertake all asked for. Even now I have 94 Orthodontic cases in hand.

As stated previously it has been necessary for me to administer all the general anaesthetics given.

From the foregoing remarks it may be judged that the provision of any semblance of a general routine dental treatment has been precluded, and made much of the examination of children in school appear unnecessary, as over the greater portion of the County any extensive measure of remedial treatment has become impossible.

Mothers and Young Children's Dental Service

As will be gathered from my previous remarks, the inspection and treatment of nursing and expectant mothers has still only been possible in the main in the Truro, Falmouth and Penzance areas. In all, 191½ sessions were devoted to the inspection and treatment of mothers and young children.

133 Mothers (50 expectant, 83 nursing) were inspected.

131 " (50 " 81 ") were referred for treatment.

131 " (50 " 81 ") were actually treated.

534 " (140 " 394 ") attendances.

151 broken appointments.

The treatment provided for mothers comprised of 134 fillings, 301 extractions, 402 other treatments. 27 received scaling and gum treatment. 4 were X-rayed.

24 were treated by prolonged nasal general anaesthetic.

101 dentures (46 full and 55 partial) were supplied to 69 mothers and

95 denture dressings were carried out.

102 were rendered dentally fit.

Several of the partial dentures involving front teeth were of an immediate type—which means that the dentures were made prior to the extractions of the teeth—and inserted in the mouth immediately following the extractions and before the patient has recovered from anaesthetic. This is a very popular form of treatment as the patient is at no time without front teeth.

The above number of dentures and the 4 repairs to dentures are in addition to the laboratory output previously shown, so that the total number of dentures turned out by the laboratory during the year was 149 and 23 repairs.

214 pre-school children were inspected and 140 referred for treatment, 136 being actually treated, and these made 273 attendances. 4 appointments were not kept. The treatment given to these children consisted of:—

72 Fillings Temporary Teeth.

64 Temporary Teeth Extracted.

225 Other Treatments of which 168 were teeth rendered self cleansing and given a Silver Nitrate treatment.

2 Children were X-rayed and 8 given General Anaesthetic.

78 Children were made Dentally Fit.

Only a minimum of work for Mothers has been undertaken because it is felt that with the staffing condition as it is; it could only be carried out at the expense of the children; this tends to prove what a large amount of treatment is likely to be called for when all the dental centres are fully manned and the availability of this service brought to the notice of the Mothers; which could be done by Dental Officers giving a certain amount of their time to Dental Health Education especially in Welfare Centres and at Parent-Teachers Associations. Before the last war, in the industrial areas especially, much good to the Mothers and children resulted from work of this sort.

It has been the policy to call on the Ambulance Service as little as possible and mainly when general anaesthetics have been administered to patients coming from a distance. Patients are expected to and do come to the various centres by bus or train where convenient services exist. In the more remote districts Dental Officers have still had to visit and treat in the schools, taking equipment of a mobile nature with them.

I should like to thank the members of the dental, medical and administrative staffs for their support, also the Ambulance Officers who have shown such help and patience on the occasions they have been approached for transport.

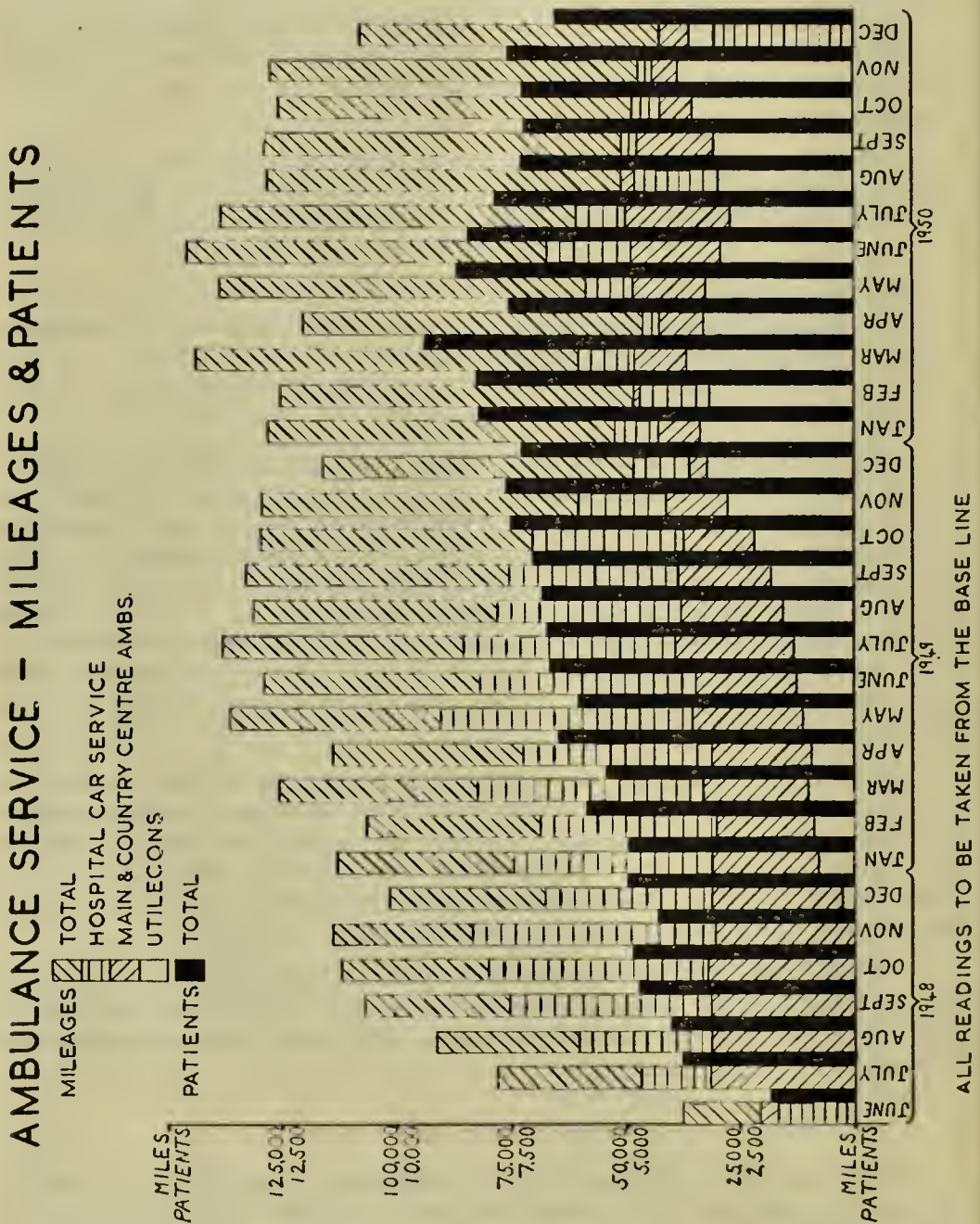
AMBULANCE SERVICE

The demands on the Service have continued to increase. The accompanying diagram shows the total number of patients transported and the miles travelled by the three branches of the Service (Ambulances, Utlecons and Hospital Car Service) from the commencement of the National Health Service Act to the end of 1950.

The enormous expansion of the Service which occurred immediately after the Appointed Day will be noted. The demand has now been checked, but the figures continued to increase till June 1950, during which month we

carried approximately four times the number of patients, and covered more than four times the mileage, as during the same month in 1948.

This considerable demand on the Service has been met with only a minor increase in establishment.



During 1949 the Service transported 76,343 patients and travelled 1,505,876 miles, whereas during 1950 the total number of patients carried was 93,688 and miles travelled was 1,557,892.

In an endeavour to prevent abuse of the Service, a system was introduced in June under which all requests from Hospitals or Clinics for the transport

of patients for medical reasons must be accompanied by a Medical Certificate signed by the Doctor at the Hospital or Clinic concerned.

The closest co-operation is being maintained with Hospital Management Committees and I should like to thank them for the way in which they have considered our problems, and endeavoured to lighten the calls being made on the Service.

The continued demands made on the Service called for a close examination of its resources; the problem that presented itself was how to plan with economy, and at the same time not to hamper the efficiency of the Service. To provide one service to cope with emergencies and another to deal with routine transport would be both uneconomical and inefficient.

With this consideration in mind, a review of the whole Service was made under the following headings:—

Vehicle Strength and Replacement Programme

We had to decide the number of vehicles necessary to provide adequate cover for the County, having regard not only to the County-owned cars at County Council manned Stations, but also to the availability of the Country Stations in the Areas, and the liability of the County Council to replace Country-owned cars by County-owned vehicles at certain Country Centres. This gave an indication of the number of additional vehicles required. An estimate had then to be made of the expectation of life of each of the vehicles at present in the Service, to find when each should be replaced. It was assumed that the average life of a public service vehicle is 100,000 miles. Adding together the increased number of vehicles estimated to be required next year, and the number of present vehicles which should be discarded next year, we arrived at the number of new vehicles to be provided.

A survey and report was made on each ambulance. This report gave the age of the vehicle, its mileage, condition of engine and body work, and estimated useful life. In conjunction with the report we compared the cost of maintenance of the vehicle for the past financial year, special consideration being paid to its oil consumption, mileage per gallon of petrol, wear and tear on tyres and cost of repairs.

Each Health Area Sub-Committee made its recommendations on the requirements of the Service to provide adequate cover within its Area; this asked for a total increase in establishment of 4 ambulances. The mechanical survey revealed that 7 of the present ambulances needed replacement during the next year. It was therefore decided that the Ministry of Health be asked to approve the establishment of County Council owned ambulances being increased to 35.

The survey included Utlecon Ambulance cars, and the same procedure was adopted. Area Sub-Committees' recommendations asked for an increased establishment of these vehicles in all areas, and it was agreed that the County establishment be increased to 24. None of these cars being over 12 months old, the mechanical survey did not call for any immediate replacements.

Maintenance and Servicing

Responsibility for the servicing and maintenance of all County-owned vehicles rests primarily on the County Fire Service, whose mechanics have continued to visit Main Centres at regular intervals. It should be added that the majority of drivers take a pride in their vehicles and carry out many minor repairs themselves.

Volunteer Manning

During the year voluntary personnel at Country Centres transported 2,642 patients travelling 86,217 miles, and have justified the confidence placed by the County Council in the keenness of the St. John Ambulance Brigade and the British Red Cross Society.

Long Distance Transport

	1949	1950
No. of patients carried in Ambulances and Utilecons ...	214	348
No. of Railway journeys arranged	203	321

Sitting Case Car Service

Utilecon ambulances, first introduced in 1949, have been used extensively for the conveyance of sitting cases to Hospital Out-Patient Departments. The following figures illustrate the increasing use of these vehicles.

	Total No. of Patients in sitting case cars	Total Mileage covered by Utilecons and Hospital Car Service	Average Mileage per patient
June 1949	4,583	Utilecons 12,895 Hospital Car Service 81,354	20.5
		<hr/> 94,249	
June 1950	4,942	Utilecons 29,258 Hospital Car Service 67,211	19.5
		<hr/> 96,469	

It is, however, important to stress that, especially in remote country districts, the voluntary service of the Hospital Car Service drivers continues to form an integral part of the medical transport arrangements of the County.

EPIDEMIOLOGY AND PREVENTIVE MEDICINE.

A survey of the work of this department is given below. Thanks to the close co-operation of the consultants and general medical practitioners in the County, much useful and interesting information has been collected.

Table III at the end of the Report shows the number of cases of infectious disease notified in each Sanitary District in the County during the year, and Table IV gives the total number of cases notified in recent years.

I have continued to act, on behalf of the Regional Hospital Board, as Medical Superintendent of the County Isolation Hospital, for the purpose of

correlating and expediting admissions. Clinical duties at the hospital are shared between my Deputy and a Consultant of the Regional Hospital Board, and in this way I am kept in the closest touch with the prevalence and severity of infectious diseases in the County.

Diphtheria

There were 16 confirmed cases of Diphtheria notified during the year and there was one death. One case occurred in an un-immunised 3 year old child, and of the remainder, nine including the fatal case, occurred in school children. Of these nine, six (including the fatal case) had not been protected by immunisation.

It is disturbing to note from the annual returns a marked fall in the rate of immunisation. This is illustrated by the fact that at the end of 1949 out of 5,195 children under 1 year of age 3,368 or 64.7% were immunised. At the end of 1950 however, out of 4,922 children under 1 year of age only 2,344 or 47.6% were immunised. An examination of the immunisation state of the under 5 population, estimated at 25,151 reveals that only 13,502 or 51.6% had been immunised at the end of 1950. This state of affairs is undoubtedly due in large measure to a complacent attitude among parents resulting from the tremendous success of the diphtheria immunisation campaign of the last decade in reducing the incidence and mortality from this disease, but it cannot too often be emphasised that only by ensuring a very high level of immunity in children can we expect to continue relatively free from this deadly disease.

Immunisation against Diphtheria is being carried out by the general medical practitioners taking part in the County Council's vaccination and immunisation arrangements, who are supplied with antigens from the Public Health Laboratory Service, and by the Assistant School Medical Officers who carry out the work in the Child Welfare Centres and Schools.

Disseminated Sclerosis

Dr. N. S. Alcock, Neurologist, has continued to notify all cases of disseminated sclerosis which he sees in the County. In the past two years 35 cases were notified.

The patients have been visited to ascertain their place of residence during the three years prior to the onset of the disease, the type of water supply and the general hygiene. Notes were taken regarding the general health of the particular case and medical history and employment in the years prior to onset.

Cases found to be indigenous to the County are plotted on a map, so that in due course any grouping of cases may be further investigated.

Enteric Fever

There were 2 notifications of Typhoid Fever during the year, one of which related to a soldier who had disembarked the previous day on return from the Middle East. There were no notifications of Paratyphoid Fever.

Food Poisoning

87 cases of Food Poisoning were notified as compared with 27 cases in 1949.

This disease is notifiable under Section 17 of the Food and Drugs Act, 1938, and has been included in the weekly returns of infectious disease since 1st January, 1949. The incidence of the disease has increased enormously in recent years, and its prevention has been one of the main subjects of the health education work dealt with later in this Report.

Infective Hepatitis

A considerable outbreak of infective hepatitis (catarrhal jaundice) occurred in the West Penwith peninsula during the autumn and winter of 1949—50.

Infective hepatitis, the epidemic catarrhal jaundice of early writers is a comparatively common disease during the autumn and early winter months and is liable to appear as small epidemics, especially amongst school children in rural areas.

Little is known of the epidemiology of the disease, the incubation period is long, being 28/40 days, the causative agent is probably a virus which is discharged in excreta and urine; it can thus be transmitted by contamination of food or water, but the possibility of spread as a droplet infection from naso-pharyngeal secretions cannot be excluded.

Many attempts have been made to transmit the disease to animals but with the possible exception of pigs, no susceptible animal has been found. It may yet prove that some domestic animals are capable of harbouring the virus in non-epidemic times, thus accounting for the mainly rural distribution of the disease.

The first case of jaundice occurred on the 2nd October, 1949; a girl of twelve attending St. Just School and living at an isolated farm some three miles from St. Just. The hygiene of the farm was unsatisfactory, but fortunately all the milk goes to the dried milk factory. Scouring, a form of gastro-enteritis, had been prevalent amongst cattle in West Penwith, but no cattle were affected at the farm in question until December. Moreover, enquiry from the veterinary surgeon in Penzance, showed the affected farms to bear no relationship to the subsequent cases of infective hepatitis.

For some time the outbreak remained confined to St. Just School. Every effort was made to prevent possible spread by food or water. The canteen at the school is new and well-run; special precautions were taken with regard to washing-up, and all drinking water was boiled. The communal tap in the playground was closed. Additional towels and soap for lavatory basins were provided; lavatory seats, chains, etc., were disinfected. Children were excluded from school at the first sign of illness.

In all, there were 56 cases at St. Just School. Spread to the surrounding areas occurred but not to the extent one would expect; there were also several cases amongst adults living in the same household or in close contact with infected children.

Tracing the serial infection of cases is often made difficult by the fact that a number of sub-clinical or abortive cases occur, many of which are undoubtedly missed. The proportion of abortive to clinical cases is probably about equal. Symptoms in such patients are mild and visible jaundice is absent. This was well illustrated by a group of cases at Lamorna Cove of which the Family Doctor kindly notified me. "A", a girl of 16 who attends St. Buryan School, developed jaundice on 2nd February, 1950. There had been no cases at the school, but on inquiry one previous case was found in Lamorna Cove, namely "D", a boy of 19 who lives opposite "A" and sees this family frequently, he developed jaundice 39 days before "A". "D's" fiancée, who lives near Porthleven, developed jaundice on 29th January, (35 days). She had been with "D" the day he was taken ill and subsequently visited him three times a week.

It was still uncertain where the boy "D" contracted the illness until it was discovered that two children often came to play with his younger sister, the elder of whom went to St. Just School. This child gave no history of illness but it was possible that she was a sub-clinical case and acted as a carrier.

It is hard to judge the effect of the preventive measures taken during the outbreak, the long incubation period, the uncertainty regarding the mode of passage from one individual to another, together with the knowledge that at least an equal number of asymptomatic cases occur to every case of jaundice, makes prevention extremely difficult; nevertheless, much experience was acquired which will be of use in future outbreaks.

Measles and Whooping Cough

668 cases of measles with no deaths and 729 cases of whooping cough with 1 death occurred during the year, as compared with 3,569 cases of measles with 1 death and 641 cases of whooping cough with 1 death in 1949.

Meningococcal Infections

Regulations made by the Minister of Health under the Public Health Act, 1936, which came into operation on the 1st January, 1950, provided, *inter alia*, for the notification of meningococcal infections in substitution for the notification of cerebro-spinal fever. 8 cases were notified during the year and there were 3 deaths amongst children in the 1—5 age group. In 1949, 2 cases of cerebro-spinal fever occurred, both being fatal cases in male infants.

Acute Nephritis

During the autumn of 1949 an abnormally high incidence of acute nephritis was noted, particularly in the western part of the County. A circular letter was therefore sent to all consultants and hospital registrars asking them to notify any cases of the disease seen by them between 1st July, 1949, and 1st July, 1950. 36 cases were notified, the age and sex distribution being as follows:—

Age Group				Males	Females
1—10	...	...	9	7
11—20	...	...	8	3
21—30	...	...	—	1
31—40	...	...	—	2
41—50	...	...	1	1
Over 50	...	...	1	3
				—	—
				19	17
				—	—

The aetiology of the disease is uncertain, but it is usually thought to be associated with a haemolytic streptococcal infection and probably due to a toxin formed by a streptococcus. A map was prepared of the incidence of notifiable streptococcal conditions (scarlet fever, puerperal pyrexia and erysipelas) over the same period, but this was not above the average for the previous 10 years, nor did the location of outbreak coincide with the location of cases of acute nephritis.

Dr. C. T. Andrews, Consulting Physician to the Regional Hospital Board, personally visited the homes of all the cases to confirm the diagnosis and investigate the home conditions. His conclusions were that the diagnosis in all cases were correct and that there appeared to be some association with streptococcal infections as 71% of the cases had suffered mild attacks of tonsillitis, otitis media or nasal catarrh in the month prior to onset. With regard to home conditions, the homes were not overcrowded—this was in marked contrast to the homes of rheumatic cases which as a rule are poor and overcrowded—but the homes struck Dr. Andrews as being abnormally cold and damp. He considered these conditions were an important predisposing cause of the disease.

Very few epidemics of Acute Nephritis have been reported in medical literature. During the spring of 1915, an outbreak of trench nephritis occurred amongst troops in Flanders, and a similar spring outbreak occurred amongst German troops on the Russian front during the Second World War, but the only outbreak described in the British Isles was one which occurred in Glasgow during the winter of 1945—46 when 159 cases were reported, mostly from a crowded tenement area.

In such epidemics there is usually a mortality of approximately 10%, although in Cornwall we were fortunate in having no deaths in the 35 cases. The outlook for the survivors is uncertain—some would appear to recover completely, others to progress to chronic nephritis. The mortality rate from Chronic Nephritis in Cornwall is high, and a comparison of the rate with that for England and Wales over the past 20 years shows the Cornwall rate to be persistently 50—100% above that of England and Wales. Exceptionally high death rates are found in all the western counties of England and Wales, indeed a map prepared to illustrate the mortality rate from chronic nephritis (fig 1), bears a striking resemblance to a rainfall map (fig. 2).

AVERAGE ANNUAL NEPHRITIS MORTALITY

ENGLAND AND WALES [ADMINISTRATIVE COUNTIES]

1942 - 1946

RATE PER
THOUSAND

UP TO
0.375



0.376
0.45



0.46
0.59



OVER
0.6

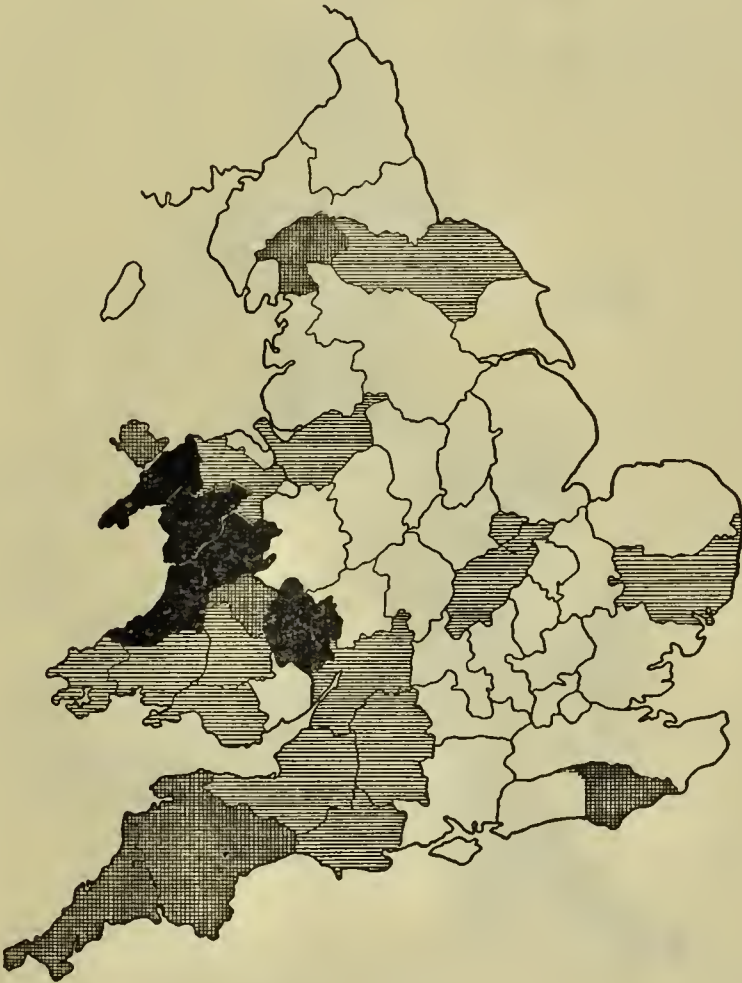


Fig. 1.

AVERAGE ANNUAL RAINFALL

ENGLAND AND WALES

1881 - 1915

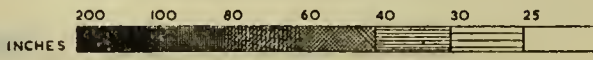


Fig. 2.

Poliomyelitis

There were 98 confirmed cases notified during the year, as compared with 110 in 1949. 81 cases were paralytic and 17 non-paralytic. 10 deaths occurred as compared with 11 in the previous year.

The following brief notes on the disease in the County during 1950 contain no new epidemiological findings, but are recorded, partly to ensure continuity in the records of the disease in the County, and partly in the hope that when placed alongside similar records from other parts of the country they may tend to clarify the position regarding the epidemiology of the disease.

INCIDENCE

The accompanying diagram (fig. 3), shows the incidence of the disease in England and Wales and in Cornwall per thousand of the population during the last five years. In three of these years (1947, 1949 and 1950) the disease reached epidemic proportions, and in the last two of these the incidence in Cornwall have been considerably higher than that in England and Wales.

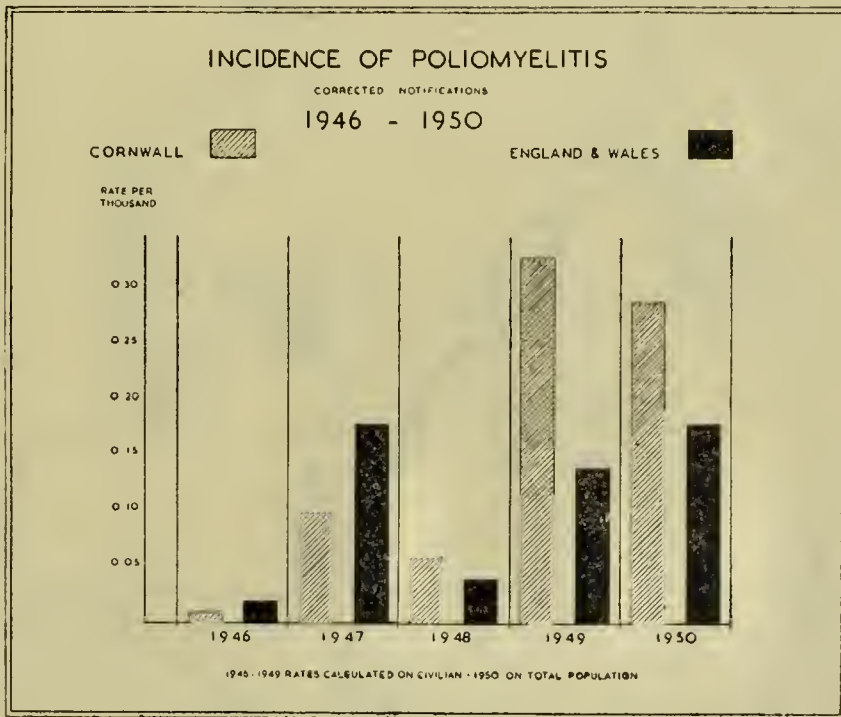


Fig. 3.

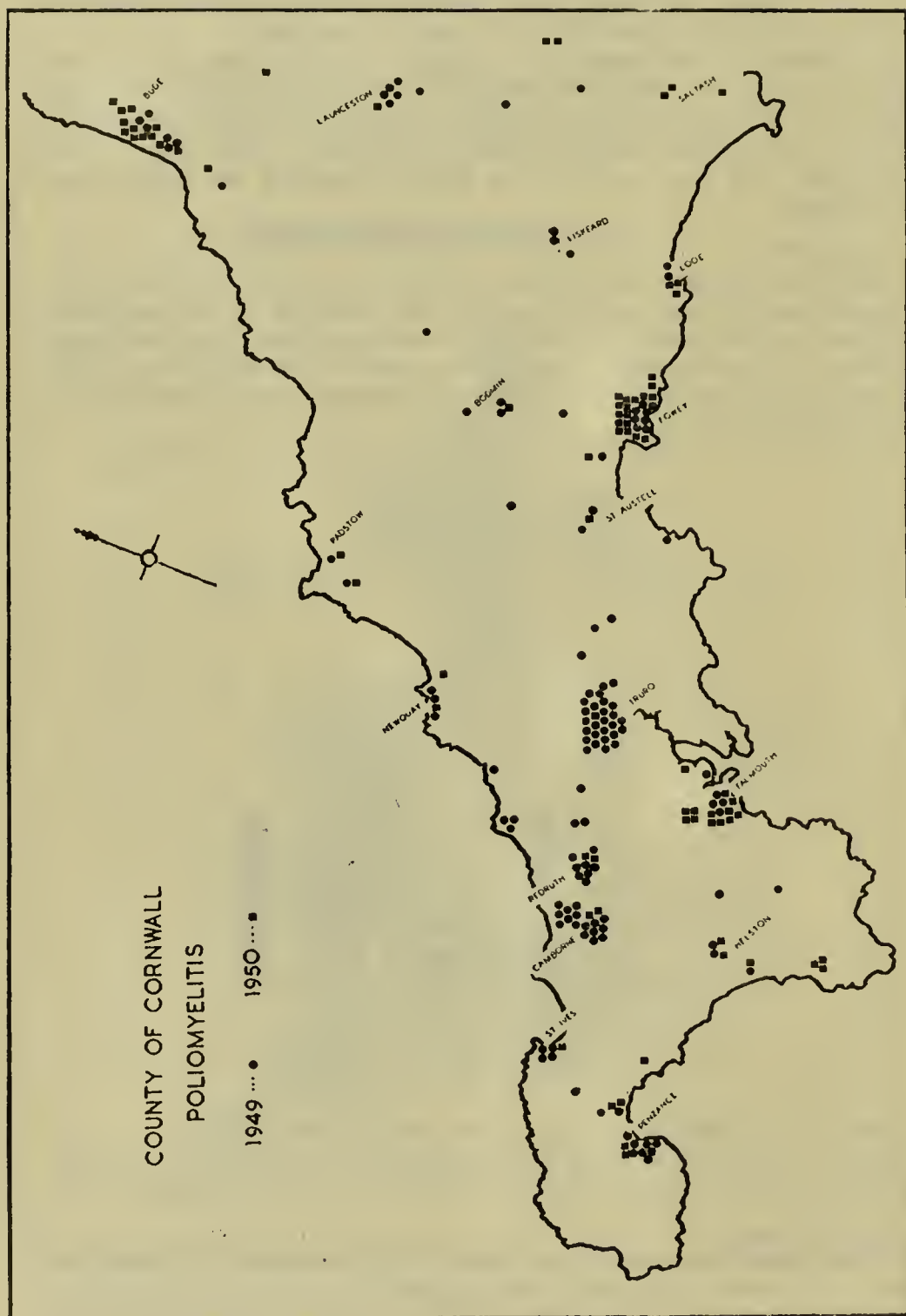
ASSOCIATION WITH VACCINATION AND IMMUNISATION

In no case which occurred in Cornwall had vaccination or immunisation been carried out within 6 weeks of the onset of poliomyelitis.

DISTRIBUTION

It has often been noted that when a high incidence of poliomyelitis occurs in a town or locality, the population acquires some degree of immunity to the disease, which does not occur again in epidemic form for two or three years.

This finding is supported by the accompanying map (fig. 4) which shows the location of the cases, and from which it will be seen that, with



the exception of Fowey, centres of population affected in 1949 escaped in 1950.

FOWEY OUTBREAK

The outbreak at Fowey was investigated by Dr. J. G. S. Turner, Assistant County Medical Officer, Health Area No. IV, to whom I am indebted for most of the details given below.

The first case in 1950 was a London school-girl who had been staying in Fowey for 6 weeks holiday. She developed poliomyelitis on 2nd September, three days after returning to London. Between the 2nd September and the end of the first week in November, a further 17 cases occurred in Fowey and the immediate neighbourhood; the details of onset and age-group are shown on the accompanying diagram (fig. 5). For the purpose of comparison, the 1949 cases are also shown.

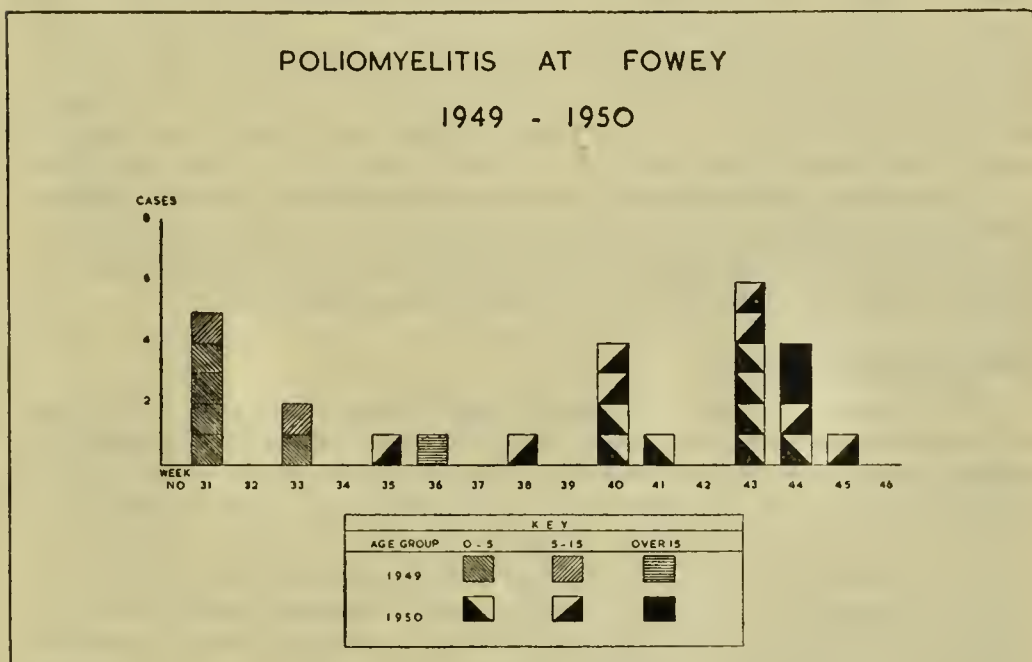


Fig. 5.

In localised outbreaks it often occurs that early cases are in the 0—4 or 5—10 age groups, and that only towards the end of the outbreak do the older children and adults become infected. This point is well illustrated in both Fowey outbreaks.

There were two instances of double infection in one family. The first example was that of a brother and sister aged 13 and 14, the interval between onset being seven days. The second is described in detail as it has certain unusual features:—

In 1949 a Dutchman, his English wife and 3 children aged 5½, 4½ and 3 years, were living in overcrowded conditions in a condemned 3-roomed cottage in one of the older parts of the town. Early in August the youngest child developed poliomyelitis and the two older children who had throughout been in intimate contact with the sick child developed symptoms suggestive of abortive attacks of poliomyelitis, but were not taken to hospital. During the spring of 1950, the family moved to a new Council house high up on the outskirts of the town. In October 1950 the two older children developed poliomyelitis, the interval between onset being 5 days. The old house vacated by this family was not pulled down, but was taken by a young married couple with three children. The wife, a woman of 30, died of poliomyelitis in November, 1950.

Much time was spent in investigating all possible sources of infection. Milk, water, ice-cream, cafes, etc., were investigated, but no common factor was found. As the outbreak proceeded, it became apparent that the cases had a connection either direct or indirect with the Girls' and Infants' School. Indeed, although only 5 of the 18 patients were pupils of the school, yet with one exception, all had indirect household contacts. The hygiene of the school and canteen were not good, but following a report to the Education Authority, were considerably improved. Early in the outbreak consideration was given to school closure, but as the children were mostly from Fowey it was felt that closure might lead to dissemination of the virus further afield and that the better policy was to keep the school open, excluding the few children who attended it from outlying districts. In the light of subsequent developments this decision was probably wrong—the close association of the cases with the school made it probable that infection was from child to child by poor personal hygiene.

This is largely a disease of children and young adolescents. Little can be done to prevent it, but early diagnosis and adequate treatment are essential in order to avoid permanent damage to the heart. A system of voluntary notification was instituted on 1st April, 1949, and the services of a consultant physician offered to all cases so notified. These arrangements worked extremely well, but in order to ensure continuity for so important a subject, it was felt that acute rheumatic fever should be added to the list of notifiable diseases. The County Council approached the Minister of Health and the necessary Regulation came into force on the 1st October, 1950.

The following table shows the cases dealt with during 1950:

Clinical Classification	Age in Years	Total	Total
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[illegible]

Clinical Classification of Case Notified	Age in Years								Total		Total both Sexes
	0—4		5—9		10—14		15 over		all ages		
	M	F	M	F	M	F	M	F	M	F	
4. Rheumatic Chorea (alone) ...	—	—	1	1	—	1	—	—	1	2	3
Total Rheumatic Cases	—	—	1	4	7	8	4	2	12	14	26
5. Congenital Heart Disease ...	—	—	—	—	—	—	1	—	1	—	1
6. Other non rheumatic Heart Disease or disorder ...	—	—	—	—	—	—	—	—	—	—	—
7. Not rheumatic or cardiac disease ...	—	—	1	—	—	—	—	3	1	3	4
Total Non-Rheumatic Cases ...	—	—	1	—	—	—	1	3	2	3	5

Scarlet Fever

263 cases were notified as compared with 214 cases in the previous year.

Smallpox

No cases occurred during the year, as compared with 4 cases in 1949.

Vaccination against smallpox is carried out almost entirely by the 148 family doctors who are taking part in the County Council's Vaccination Scheme, under which they are supplied with free lymph through the Public Health Laboratory Service. Arrangements have been made for vaccination to be carried out by members of the County Council's Medical Staff as required.

During the year 1,714 persons were vaccinated and 647 re-vaccinated. These figures compare with 7,445 persons vaccinated and 5,686 re-vaccinated during the previous year when cases of smallpox occurred in the County.

TUBERCULOSIS

At the end of the year there were 2,015 cases of tuberculosis on the notification register, an increase of 34 over the previous year. This figure includes 271 cases notified during the year, as compared with 309 cases notified in 1949. The following table shows the new cases notified and the mortality from tuberculosis during 1950.

Age Period	New Cases Notified				Deaths			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory	
	M	F	M	F	M	F	M	F
0—1 ...	—	1	—	—	—	—	—	1
1—5 ...	3	—	3	—	—	—	—	3
5—15 ...	17	8	9	1	—	—	1	—
15—45 ...	76	83	8	3	31	13	2	4
45—65 ...	34	4	1	2	32	10	3	1
65 and over	13	3	1	1	16	6	1	2
	—	—	—	—	—	—	—	—
	143	99	22	7	79	29	7	11
	—	—	—	—	—	—	—	—
	242		29		108		18	
	271				126			

The notifications of non-respiratory tuberculosis were as follows:—

	1946	1947	1948	1949	1950
Bones and Joints ...	9	13	21	11	5
Glands	8	7	4	21	16
Meninges	2	3	5	5	4
Abdomen and Peritoneum	4	1	2	4	2
Kidneys and Bladder ...	2	—	2	2	2
Others	1	4	1	4	—
	—	—	—	—	—
	26	28	35	47	29
	—	—	—	—	—

The following Table shows the changes which have taken place in the mortality from respiratory tuberculosis and other forms of tuberculosis, during recent years:—

Year	CORNWALL			CORNWALL			ENGLAND & WALES		
	Number of Deaths			Death Rates			Death Rates		
	Respira- tory	Other Forms	All Forms	Respira- tory	Other Forms	All Forms	Respira- tory	Other Forms	All Forms
1931	203	61	264	0.65	0.20	0.85	0.72	0.16	0.88
1932	205	39	244	0.65	0.12	0.77	0.67	0.15	0.82
1933	205	46	251	0.65	0.15	0.80	0.67	0.13	0.80
1934	214	43	257	0.68	0.14	0.82	0.61	0.13	0.74
1935	154	49	203	0.49	0.15	0.64	0.59	0.11	0.70
1936	159	45	204	0.51	0.14	0.65	0.56	0.11	0.67
1937	168	28	196	0.55	0.09	0.64	0.56	0.11	0.67
1938	150	44	194	0.49	0.14	0.63	0.52	0.10	0.62
1939	147	33	180	0.48	0.10	0.58	0.52	0.10	0.62
1940	169	41	210	0.51	0.12	0.63	0.56	0.11	0.67
1941	156	44	200	0.42	0.12	0.54	0.57	0.13	0.70
1942	142	35	177	0.41	0.10	0.51	0.50	0.11	0.61
1943	155	46	201	0.47	0.14	0.61	0.51	0.10	0.61
1944	132	29	161	0.41	0.09	0.50	0.47	0.10	0.57
1945	136	42	178	0.43	0.13	0.56	0.47	0.09	0.56
1946	132	39	171	0.41	0.12	0.53	0.45	0.08	0.53
1947	138	28	166	0.43	0.09	0.52	0.46	0.08	0.54
1948	112	32	144	0.34	0.10	0.44	0.44	0.07	0.51
1949	127	23	150	0.38	0.07	0.45			0.45
1950	108	18	126	0.32	0.05	0.37			0.36

The dispensary register, on which there were 2,226 cases at the end of 1950, is the responsibility of the Regional Hospital Board, but the essential liaison between the dispensaries and the Health Area Offices is secured by the attendance of Health Visitors at the dispensaries.

The Table below shows the cases diagnosed at the dispensaries for the past 20 years.

NEW (DEFINITE) CASES.

Year	Respiratory				Non-Respiratory				Respiratory and Non-Respiratory
	Men.	Women	Children	Total.	Men	Women	Children	Total	Total
1931	107	95	9	211	9	10	8	27	238
1932	102	92	6	200	8	15	15	38	238
1933	103	73	7	183	13	7	4	24	207
1934	91	74	5	170	12	18	15	45	215
1935	87	51	2	140	8	10	8	26	166
1936	77	66	5	148	7	5	6	18	166
1937	79	60	9	148	12	4	6	22	170
1938	92	56	3	151	17	11	14	42	193
1939	74	64	6	144	10	13	18	41	185
1940	93	68	7	168	10	5	15	30	198
1941	97	68	6	171	9	6	21	36	207
1942	126	58	5	189	7	5	14	26	215
1943	104	67	5	176	10	13	19	42	218
1944	93	64	—	157	4	17	21	42	199
1945	135	82	1	218	11	4	9	24	242
1946	94	85	3	182	7	7	11	25	207
1947	154	89	28	271	18	20	27	65	336
1948	184	133	43	360	14	19	38	71	431
1949	151	128	32	311	10	14	25	49	360
1950	167	115	20	302	9	7	12	28	330

These then are the statistics which purport to show the incidence and mortality of tuberculosis in Cornwall. What do they mean? Are they so reliable that firm conclusions concerning the trend of tuberculosis in Cornwall can be drawn from them? The answer, unfortunately, is No. The table showing the number of new definite cases diagnosed at the Dispensaries for the past 20 years shows a great increase in the number of cases over the last 5 years. Is this due to an increased incidence of tuberculosis? The position is confused by the great extension of the Dispensary Service during the same period, and the increased number of cases may simply reflect an

increased proportion of cases of tuberculosis being sent to the Dispensaries. The number of cases notified has also increased during the last 5 years, but this, of course, may reflect an increased interest in tuberculosis, or a greater conscientiousness in notifying the disease. More reliable than either of these figures is the death rate from tuberculosis, which has shown a substantial fall during the last few years. Here again, there is some doubt as to the reason for the fall. Greatly improved methods of treatment have come into operation during the last few years, and the reduction in mortality may be due mainly to them rather than to a diminution in incidence or severity of the disease. If we were to consider only the number of deaths from tuberculosis, we may become lulled into a false sense of security, and leave it to the passage of time to eliminate the disease for us. The other figures, however, show how very necessary is the full-scale attack being made on tuberculosis and with what vigour this campaign must be pressed.

Some notes on the general methods used in the prevention of tuberculosis were given in my Annual Report for 1949. During 1950 progress has been made in the application of these methods in the County, and a summary of the work carried out is given below.

Hospital admissions

It is obviously useless to take any active measures with a view to discovering new cases unless hospital accommodation is available for the cases so found. The County is badly off for hospital beds for tuberculosis, having only 142. Even with this small number of beds available, it was felt that a great deal could be done provided the turnover could be speeded up. A patient who has remained at home for six months awaiting admission is likely to be in a more advanced stage of the disease, and in consequence will require a longer stay in the sanatorium than if admitted immediately on diagnosis. If early admission could be ensured it should be possible to reduce the time in the sanatorium, and the first essential is therefore to secure that the discharge of sanatorium patients is not delayed because of unsuitable home conditions. The homes of all patients in the sanatorium are being visited and action taken to see that

- (a) the home is not overcrowded and that a separate room is available for the patient on his return, or if necessary, a shelter is provided,
- (b) adequate home nursing is available and where necessary a Home Help supplied,
- (c) all household contacts under the age of 40 years who are willing are protected against tuberculosis by B.C.G. vaccination.

This work is undertaken by the Assistant County Medical Officers in conjunction with the Tuberculosis Specialists, and as soon as a satisfactory report has been received, the Medical Superintendent of the sanatorium is informed that there is no epidemiological reason why the patient should not return home. The Medical Superintendent has undertaken to admit more cases on social grounds. This means that although it may not be possible to undertake any treatment that could not be carried out at home under dispensary supervision, nevertheless patients will be admitted, trained in the precautions they should take to avoid spreading infection, and the period of sanatorium treatment will be used to carry out the B.C.G. vaccination of susceptible contacts.

General considerations

In view of the shortage of beds and the limited medical and nursing staff available for field work, it is manifestly impossible to make a vigorous attack against tuberculosis on a County-wide scale, but if an additional thirty or forty beds could be obtained, a start could be made on a small area without any additional staff.

At their meeting on 20th June, 1950, the Finance and General Sub-Committee recommended to the Health Committee (which subsequently approved the proposal), that a campaign be commenced immediately with a view to reducing the incidence of tuberculosis in the County, and approaches to the Regional Hospital Board for additional hospital beds and for the use of the Mass Radiography Unit in certain specified areas were authorised.

An intensive anti-tuberculosis campaign in a circumscribed area may be expected to produce something in the region of three cases per thousand of the population who will require a hospital bed; therefore in one health area of the County approximately 150 cases will be revealed, and it is felt that an additional fifty beds should be sufficient to clear up one Health Area in one year.

The Regional Hospital Board has been asked to allocate additional beds for the treatment of tuberculosis in the County, and by using these beds it is hoped to deal with one administrative area every year, thus covering the County in seven years.

Incidence

When deciding on which area to start, it was tempting to tackle the problem on a geographical basis, namely to commence in Area 1 and work progressively eastwards; second thoughts suggested that the greatest good could be done by commencing where the incidence is highest. A map was therefore prepared showing the comparative incidence per thousand of the population in each district of the County (fig. 6). It will be noted that two districts, namely St. Just U.D. and Penryn M.B. have an incidence more than 100% above the mean for the County. St. Just has one of the few remaining tin mines still in use in Cornwall and Penryn is the centre of the granite quarrying industry. The whole of the West Penwith peninsula has a high incidence, and in consequence both geographically and epidemiologically, West Penwith is the area of choice.

Investigation in West Penwith Peninsula

General Consideration

The peninsula contains the Boroughs of Penzance and St. Ives, the rural district of West Penwith and the urban district of St. Just. This last has a total population of 4,360. For electoral purposes it is divided into two wards (a) St. Just Church Town (population 2,660), (b) Pendeen Ward (population 1,700), the former consists of St. Just town and the latter of the little clusters of houses, Carnyorth, Trewellard, Pendeen and Bojewan which straddle the main road as it passes north along the coast towards St. Ives.

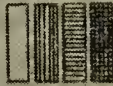
MAP OF THE

ADMINISTRATIVE COUNTY OF CORNWALL.

INCIDENCE OF TYPHOID - BASED ON NOTIFICATION DATA AT MARCH 1922.

MEAN INCIDENCE 5.5 per 1,000

Incidence up to and including 25% above Mean ...
 Incidence between 25% and 50% above Mean ...
 Incidence between 51% and 100% above Mean ...
 Incidence over 100% above Mean ...



Scale from 0 to 10 miles

Cornwall Medical Officer of Health
 County Council, Truro
 1922

Fig. 6.

The town, once a prospering mining centre, is now bereft of any staple industry; one mine, Geevor, which lies some three miles north of St. Just, is still working and many of the men who live in this part of the urban district are employed at the mine.

Geevor Mine is located above the cliffs to the east of Pendeen, it employs approximately 250 men of whom 150 work underground. Labour has been difficult to obtain for some years and of the underground workers, 50 are Polish.

The mine has always been progressive and willing to introduce modern methods. Wet drilling has been in use since 1935. The ore is soaked in water before being crushed; a mist machine sprays each adit for 6 hours after blasting and miners are not allowed in during that time. A covered way leads from the mine head to the changing rooms where hot showers are provided.

Dr. L. W. Hale has taken a keen interest in the miners and has been associated with the introduction by the Medical Research Council in 1945 of anti-silicosis measures.

Aluminium dusting is installed in one of the changing rooms, but its use is voluntary, approximately half of the men taking advantage of it. All new entrants to the mine are X-rayed.

The mine however had an unsavoury reputation in the past and it is noteworthy that in the years 1927—1937 inclusive, of the 132 notifications of tuberculosis in the St. Just U.D.C., 46 were miners, whereas of the 103 notifications in the period 1938—1948 only 11 were miners; this would appear to indicate that the measures that have been taken against silicosis are having some effect.

The houses in the district are sturdily built in granite. As there is little natural shelter from the Atlantic gales, the west walls are usually devoid of windows and on other aspects, windows are small. The Churchtown has a piped water supply and sewage disposal system, but the urban district to the north relies upon water from mine adits or wells and for the most part, earth closets are used. Rents are low, £5 to £10 a year. The product of a 1d. rate is £45.

Survey of Cases

The tuberculosis register contains 54 names in the St. Just Urban District, 46 being pulmonary and 8 non-pulmonary. The homes of all these patients have been visited by Dr. Hargreaves and in each case a brief appreciation has been made to decide:—

- (a) the source of infection
- (b) the home conditions
- (c) necessary action.

These investigations were greatly facilitated by the whole-hearted co-operation of the general medical practitioners in the area, and of the Urban District Council. The families themselves, without exception, gave every assistance, much useful information having been supplied from Family Bibles. The investigations revealed the following factors of epidemiological interest:—

(a) Distribution of Cases—The incidence throughout the area is by no means evenly distributed. A breakdown of the figures for the Urban District into its two Wards gives the following figures:—

			No. of	Incidence
		Popn.	Cases	per 1000
St. Just Church Town	... ..	2660	19	7.14
Remainder of U.D.	... ..	1700	35	20.6

(b) Affected Houses—Certain blocks of houses would appear to be heavily infected. In one isolated group of fifty-four houses there are eleven known cases and there have been sixteen deaths in the past twenty-five years.

(c) Association with Industry—Of 14 indigenous cases in St. Just Church Town, 5 have worked in the mines, one has a close relative in the mines and the remaining 8 are unconnected with the industry.

Of 24 indigenous cases in the Pendeen Ward, 5 are tin miners, 15 have father or brothers who have worked in the mines (9 known to be tuberculous), the remaining 4 (all members of the same family) are unconnected with the industry.

The figures, though small, show a high percentage of cases in the Geevor district to be connected with mining (83%) when compared with St. Just Church Town (43%).

(d) Familial Tendency—In the Pendeen Ward, the cases were largely confined to the descendents of four or five families.

Planning Survey

The County Planning Department is making a detailed survey of the St. Just Urban District, to determine:

- (a) the probable life of existing houses,
- (b) occupation and place of work. Many are employed in Penzance and obviously would be better re-housed there than at St. Just.
- (c) rehousing—suitable sites and the number of new houses necessary.

The scattered nature of the houses, particularly at the Pendeen end of the Urban District Council's area, where houses of little value are found scattered in small terraces over the countryside, makes the cost of providing them with such essential Health Services as water supply and sewage disposal very nearly prohibitive. The closest touch is being maintained with the County Planning Department in order to ensure that in the building of new houses, this mistake is not repeated, and that the new buildings are conveniently grouped in an area which can be watered and sewered economically.

B.C.G. Vaccination

This will be used for the protection of all susceptible contacts in the area.

Mass Radiography

The Unit will operate in St. Just in February 1951 and remain in the area for six weeks. All School Children over 11 years of age will pass through the Unit as part of the routine medical examinations.

All school children under 11 years will be Mantoux tested, any positive reactors will have large films taken.

As high a proportion of the general public as possible will be persuaded to pass through the Unit.

The St. Just Urban District Council has been approached and has agreed to nominate a small representative sub-committee who will assist in securing a good response to Mass Radiography and B.C.G. Vaccination.

Rehabilitation

Every effort is being made to place patients in suitable employment following discharge from the Sanatorium. The Ministry of Labour Disablement Rehabilitation Officer has already placed for us, 61 patients, and the Education Committee has made grants to enable 22 patients in the Sanatorium to take Correspondence Courses in order to train them for commercial posts.

CARE AND AFTER-CARE.

Tuberculosis.

The environmental circumstances of each newly notified case of tuberculosis are reported upon by a Health Visitor unless the medical practitioner indicates that he does not wish the patient to be visited. The Health Visitor arranges for the patient and contacts to attend at the nearest dispensary, where the report is available to the Tuberculosis Officer.

If a domiciliary visit is necessary, this is arranged by the Health Visitor. The Tuberculosis Officer refers appropriate cases to the National Assistance Board, issues any certificates required, (e.g. for the exclusion of a child from school), and advises the Health Area Office of any such action taken by completing a report form which is forwarded with the report on home conditions and also contains any recommendation the Tuberculosis Officer may wish to make regarding re-housing, the loan of a shelter, bed or bedding, or the grant of extra nourishment, etc.

Recommendations for after-care are made on purely clinical grounds and the decision whether it should be provided by the County Council is made by the Assistant County Medical Officer after investigation of the financial circumstances of the patient.

109 patients received after-care grants during the year, and 78 were in receipt of grants at the end of the year.

The closest co-operation between the Health Area Office and the National Assistance Board ensures that everything possible is done to secure the social and physical welfare of patients and their families through the financial assistance of the Board and the after-care service of the County Council.

The Tuberculosis Officers, who are responsible for the treatment of tuberculosis, are concerned also with preventive and care work, and are accordingly appointed jointly by the Regional Hospital Board and the County Council.

The nursing of patients in their own homes is undertaken by the County Council's District Nurses and nursing requisites are available from the nurses' loan cupboards.

In addition to the liaison with the National Assistance Board referred to above, close co-operation is maintained with Welfare Officers and with the Children's Officer, who has done invaluable work in arranging for the care of children of tuberculous parents who would be exposed to considerable risk of infection if allowed to remain in their own homes; for the temporary care of children to facilitate the institutional confinement of the mother where this has been necessary for medical or environmental reasons; and in many other directions where the duties of the Children's Department are related to the work of the Health Department.

Workshops and Settlements — The County Council has undertaken financial responsibility for the training of two patients in Papworth Village Settlement.

Care and After-Care of Other Types of Illness—Illness generally— During the year under review much has been done to co-ordinate the health visiting, home nursing and home help schemes and to establish close co-operation between these services and the almoners of local hospitals. Co-operation has also been established with the Welfare Officers and the Children's Officer, the Area Officers of the National Assistance Board and other official and voluntary agencies.

HEALTH EDUCATION.

The aim of Health Education is to ensure that every person should live a normal life without unnecessary sickness or discomfort. Much illness could and should be avoided, and this preventive aspect of Public Health is carried out by doctors, health visitors and nurses. By telling the public those factors which favour or prevent disease we hope to reduce the incidence of sickness. From a financial point of view it is more economical to prevent illness than to treat established disease. The chief obstacle is to arouse sufficient public interest in positive health.

The County Council continue to take advantage of the services of the Central Council for Health Education by contributing to its funds 10/- per 1,000 of the population. These services include residential courses for health visitors and teachers, touring lecturers, and propaganda material and literature—posters and leaflets, this latter being free to the value of one-sixth of the contribution. There is also a central library from which books on health education can be borrowed free of charge.

In the Spring a two-day course was held at St. Austell by the Central Council for Health Education on the "Principles, Methods and Media of Health Education." The Course was well attended by Assistant County Medical Officers, School Medical Officers, Health Visitors, and Nurses from all parts of the County. Great interest was taken in the lectures and in the discussions which followed. At the same time Courses were held by the Central Council for teachers, parents, and staffs of Children's Homes and Nurseries.

The Exhibition Stand, loaned by the Central Council was displayed throughout the year. The following topics were on view:—

Care of the Teeth
Head Lice
Care of the Feet
The work of the Health Visitor
Breast feeding
Milk.

The work of educating the public in healthy living is mostly carried out at Child Welfare and Ante-Natal Clinics and in the homes during the visits by health visitors and nurses. It is hoped to extend this work in the schools.

Talks, demonstrations and discussions were given at the Child Welfare and Ante-Natal Clinics as follows:—

Area I

Diphtheria Immunisation
Breast feeding
Care of teeth
Feeding toddlers
Infants clothing
Vaccination
Flies
Food Storage
Bottle feeding and care of bottles
and teats
Safety-first in the home

Vitamins
Home Nursing
Measles and Whooping Cough
Diets
Sleep
Posture
Prevention of colds
How to keep fit
Value of fresh air
Weaning

Area II

Breast feeding
Clothing
Constipation
Prevention of accidents in the home
Painless childbirth
You and your child
Diet
Teething
Vaccination
Infection and Immunisation

Bottle hygiene
Planning baby's day
Mothers and Fathers
Pestalozzi and his work
Bathing baby
Handling small baby
Cleaning and storing bottles and
teats
Cot making

Area III

Ante-natal care
Infant clothing
Dental caries
First aid
Diets
Vitamins
Breast feeding
Food storage in the home
Personal problems
Care of milk
Weaning
Flies

Children's ailments
Vaccination and Immunisation
Exercise
Posture
Prevention of sunburn
Care of young children on beach
Dressing and undressing infants
Prevention of colds
Choice of toys
Measles
Habits of young children

Area IV

Preparation of baby's basket
 Dental caries
 Home making
 Food handling
 Prevention of infection
 Emergency cot

Clothing
 Diet for expectant Mothers
 Food for growing children
 Prevention of accidents in the home

Area V

Ante-natal care

Area VI

Rules of Health
 Infant feeding
 Relaxation exercises

Mothercraft
 Infant management
 Value of priority rations and vitamins in pregnancy

Area VII

Dentition
 Individual problems
 Minor ailments of children
 Diet
 Vitamins
 Immunisation
 Weight
 Accidents to toddlers
 First aid
 Tuberculosis
 Value of sunshine
 Mothercraft
 Course of labour
 Food
 Sleep
 Colds
 Rules of health
 Minor ailments of pregnancy
 Feeding hints for children
 Bed wetting
 Imaginations in children's play
 Extra rations and vitamins during pregnancy

Footwear
 Discussion on teething powders and aperients
 Vaccination
 Hygiene
 Posture
 Breast feeding
 Clothing during pregnancy
 Infant clothing
 Development of child during first year
 Suggestions for cot covers, and home-made carriers
 Infantile paralysis
 Food handling
 Fresh air and exercise
 Care of bottles and teats
 Poisonous berries
 National Health Service
 Flies and Food contamination
 Safety first
 Promotion of lactation
 Quiz on infant care
 Milk as a food

Talks and discussions are amplified by suitable demonstrations, display of posters and the distribution of leaflets. Many health visitors illustrate their subject by using a flannel-graph. All these visual aids increase the interest of the audience.

The cine-projector, provided by the County Council has been used on 25 occasions at clinics. Films on health and hygiene illustrating parent-craft, child care and training, value of diphtheria immunisation, good posture, spread of infection, danger of flies, food poisoning, breast feeding, and ante-natal care have been shown.

Clean Food Campaign

Film shows have also been given to audiences of Women's Institutes 9 times during 1950, and to 6 groups of food handlers. These have been films on food poisoning illustrating the need of scrupulous care on the part of all who touch food. These films are preceded by a talk on the subject by the Assistant County Medical Officers and followed by questions and discussions. Films have been shown 5 other times, including twice in schools.

Other lectures on health have been given by doctors and nurses to various organisations such as Women's Institutes, Parent-Teacher Associations, Toc H.

Although the desire for knowledge of how to live a long life, and how to avoid disease is felt by everyone, most people are too apathetic to make any effort to maintain their health until they lose it. It is this general apathy which workers in health education find most discouraging. It is difficult to assess the results, but the improvements in health and hygiene which result from health education are becoming manifest.

MENTAL HEALTH.

REPORT OF COUNTY PSYCHIATRIST.

I. Administration

(a) Constitution and meetings of Mental Health Sub-Committee

The constitution of the Mental Health Sub-Committee remains unchanged. The Committee has continued to hold quarterly meetings.

(b) Number and qualifications of staff employed in the Mental Health Service

The staff employed in the Mental Health Service is as given at the beginning of this report.

(c) Co-ordination with Regional Hospital Boards and Hospital Management Committees

No formal arrangements have yet been entered into with the Regional Hospital Board or with the Hospital Management Committees for the co-ordination of Mental Health Services.

Vacancies for mental defectives in Institutions have been strenuously sought and difficult to obtain, though the position eased a little during the year so far as high-grade female patients were concerned. It is still very difficult to find suitable accommodation for mentally defective children, and many of the cases still at home present difficulties.

Patients on licence throughout the County from Institutions for mental defectives have been supervised for various Hospital Management Committees, and all necessary reports and recommendations made.

(d) Duties delegated to Voluntary Associations

No Mental Health duties have been delegated to voluntary associations, but during the year two mental defectives continued to be supervised on behalf of the Mental Health Authority by the Brighton Guardianship Society.

II. Account of work undertaken in the Community

(a) The Mental Health Section of the County Health Department is under the immediate supervision of the County Psychiatrist, who also undertakes work on behalf of the Education Committee, thus securing a co-ordinated Mental Health Service. It has not yet been possible to initiate arrangements for any scheme of preventive work, but records of all cases seen at Child Guidance Clinics, or referred otherwise from any source for advice and guidance, will eventually make this possible.

The after-care cases referred to the Local Health Authority were dealt with by the Social Worker, until she left the County in October.

(b) Lunacy and Mental Treatment Acts

Duly Authorised Officers dealt with the following cases, under the Lunacy and Mental Treatment Acts 1890—1930:—

Certified Patients	...	220
Voluntary Patients	...	76
Temporary Patients	...	4

(c) Mental Deficiency Acts, 1913—1938

73 persons were reported during 1950 to the Mental Health Authority as being mentally defective. Of these, 34 were reported under Section 57 of the Education Act, 1944, the remainder (39) being ascertained from other sources, such as the Assistance Board, Probation Officers, the N.S.P.C.C., Family Doctors, the Children's Officer, Mental Health Workers, and parents.

By the end of the year these 73 reported cases had been disposed of as follows:—

Admitted to Institutions:	17
Placed under Statutory Supervision:	20.
Died or removed from the area:	2.
Action not completed at the end of the year:	24.
Found not "subject to be dealt with":	10.

On the 31st December, 1950, the total ascertainment of mentally defective persons in Cornwall was as follows:

- (a) Patients in Institutions for defectives, or on licence therefrom: 373.
- (b) In "Places of Safety": 3.
- (c) Under Statutory Supervision: 443.
- (d) Under Guardianship: 18.
- (e) Not "subject to be dealt with", but under Voluntary Supervision: 13.

Orders were made during the year sending 29 mentally defective persons to Institutions. The Orders were made as follows:

23 by Petition; 3 under Section 8; 3 under Section 9; and 1 by Varying Order from Guardianship. At the end of the year there were 84 patients urgently requiring Institutional care. There were many more patients in their homes for whom a period of training in an Institution would be a great advantage, and also many mentally defective persons in Mental Hospitals and in accommodation provided under Part III of the National Assistance Act, 1948, Children's Homes, etc., for whom accommodation in Institutions for defectives was required. There were 18 patients under Guardianship on the 31st December, 1950.

III. Training

No Occupation Centres exist at present, and it has not yet been possible to secure the training of defectives in their homes. The possibility of opening up one or two Occupation Centres in larger towns has been carefully considered, but owing to difficulties of transport, and unfavourable economic conditions, it has been found impossible to recommend these services. Such services in Cornwall would no doubt prove to be the answer to a big social problem, for it is obvious that parents realise the necessity for, and would appreciate, some training facilities for their offspring.

BLIND PERSONS

Sections 29 and 30 of the National Assistance Act 1948, which came into operation on 5th July 1948, superseded much previous legislation for blind persons and gave Local Health Authorities the power (subsequently made a duty by direction of the Minister of Health) to promote the welfare of blind and partially-sighted persons.

Local Health Authorities are precluded by this Act from giving financial assistance to the blind, except to those for whom they provide work, this duty having been taken over by the National Assistance Board. The Act permits the Local Health Authority to carry out its duties through duly registered voluntary bodies, and advantage was taken of this permissive clause to arrange for the work to be continued by the Cornwall County Association for the Blind.

There are 6 Home Teachers, five sighted and one blind. The Home Teaching service of the County Blind Association includes regular visits to the blind and observation cases, instruction in Moon and Braille reading, assistance in obtaining pensions, etc., and advice on the prevention of blindness. There are 16 blind Home Workers in the County.

There were 829 registered blind persons on 31st March, 1951 (318 males and 511 females), an increase during the 12 months of 6.

The following Table shows the age groups of blind persons:—

Age Period.			Males	Females	Total
0	...	...	—	—	—
1	...	...	—	—	—
2	...	...	1	—	1
3	...	...	—	—	—
4	...	...	—	1	1
5—10	...	...	5	—	5
11—15	...	...	3	4	7
16—20	...	...	5	1	6
21—30	...	...	6	16	22
31—39	...	...	12	14	26
40—49	...	...	25	24	49
50—59	...	...	44	48	92
60—64	...	...	32	37	69
65—69	...	...	42	55	97
70 and over	...	...	143	311	454
Totals			318	511	829

Ages at which Blindness occurred:

Age Period.			Males	Females	Total
0	...	...	25	32	57
1	...	...	—	—	—
2	...	...	2	—	2
3	...	...	2	1	3
4	...	...	—	—	—
5—10	...	...	10	14	24
11—15	...	...	5	8	13
16—20	...	...	13	5	18
21—30	...	...	18	26	44
31—39	...	...	24	19	43
40—49	...	...	36	53	89
50—59	...	...	45	82	127
60—64	...	...	31	56	87
65—69	...	...	27	48	75
70 and over	...	...	80	167	247
Totals			318	511	829

Blind Persons Registered as New Cases during the year:

Age Period.	Males	Females	Total
0	—	—	—
1	—	—	—
2	—	—	—
3	—	—	—
4	1	—	1
5—10	—	—	—
11—15	1	1	2
16—20	—	—	—
21—30	—	—	—
31—39	1	1	2
40—49	2	6	8
50—59	5	9	14
60—64	5	6	11
65—69	6	12	18
70 and over	16	48	64
Totals	37	83	120

Age at onset of Blindness in New Cases:

Age Period.	Males	Females	Total
0	1	1	2
1	—	—	—
2	—	—	—
3	—	—	—
4	—	—	—
5—10	—	—	—
11—15	1	1	2
16—20	—	—	—
21—30	—	—	—
31—39	1	—	1
40—49	2	7	9
50—59	6	11	17
60—64	6	9	15
65—69	5	9	14
70 and over	15	45	60
Totals	37	83	120

Blind Children under 16:

Age under 2 — Nil.

Age 2—4 +	
Educable ...	1
Ineducable ...	1

Age 5—15 +
Educable

	M	F	Total
Attending Special Schools for the Blind:			
(i) Blind but NO other defects ...	4	2	6
(ii) Blind WITH other defects ...	—	—	—
Not at School:			
(i) Blind but NO other defects ...	1	1	2
(ii) Blind WITH other defects ...	1	—	1
	<u>6</u>	<u>3</u>	<u>9</u>

Ineducable

	M	F	Total
In Mental Deficiency Institutions:			
(i) Blind	—	—	—
(ii) Blind with Multiple defects ...	2	—	2
At home or elsewhere:			
(i) Blind	—	—	—
(ii) Blind with Multiple defects ...	—	1	1
	<u>2</u>	<u>1</u>	<u>3</u>

Education, Training and Employment (Age periods 16 years and upwards):

Employed			
(a) In Workshops for the Blind ...	1	—	1
(b) As approved Home Workers ...	8	8	16
All others not included in (a) or (b)	18	5	23
Total employed ...	<u>27</u>	<u>13</u>	<u>40</u>
Undergoing Training ...	4	1	5
Unemployed			
Not Training but Trainable ...	5	—	5
No. available for Employment:			
Age group 16—59 ...	21	47	68
Age group 60—64	10	20	30
Not capable of work:			
Age group 16—59	44	43	87
Age group 60—64	18	17	35
Not employed over 60	180	365	545
Grand total ...	<u>309</u>	<u>506</u>	<u>815</u>

Occupations of Employed Blind Persons:

			Within Work- shops for the Blind	In approved Home Workers Schemes	Others not Pastime workers	Total
Agricultural Workers	...	—	—	—	2	2
Basket Workers	...	...	1	4	1	6
Boot Repairers	...	...	—	—	2	2
Carpenters and Woodworkers	...	...	—	—	1	1
Clerks and Typists	...	...	—	—	2	2
Dealers, Tea Agents, News- agents, Shopkeepers	...	...	—	—	4	4
Domestic Workers	...	...	—	—	1	1
Home Teachers	...	...	—	—	1	1
Machine Knitters	...	...	—	7	—	7
Masseurs and Physiotherapists	...	...	—	—	1	1
Mat Makers	...	...	—	—	1	1
Ministers of Religion	...	...	—	—	2	2
Musicians and Music Teachers	...	...	—	2	—	2
Newsvendors and Hawkers	...	...	—	—	1	1
Piano Tuners	...	...	—	3	—	3
Poultry Keepers	...	...	—	—	1	1
Telephone Operators	...	...	—	—	1	1
Miscellaneous	...	...	—	—	2	2
			<u>1</u>	<u>16</u>	<u>23</u>	<u>40</u>

Physically and Mentally Defective and Mentally Disordered Blind
Persons (All ages)

			M	F	Total
(a) Mentally Disordered	...	...	5	7	12
(b) Mentally Defective	...	...	6	4	10
(c) Physically Defective	...	...	43	55	98
(d) Deaf without Speech	...	...	—	1	1
(e) Deaf with Speech	...	...	9	15	24
(f) Hard of Hearing	...	...	8	9	27
Combination of (b) and (c)	...	...	2	1	3
Combination of (c) and (d)	...	...	—	1	1
Combination of (c) and (e)	...	...	1	5	6
Combination of (c) and (f)	...	...	1	—	1
			<u>75</u>	<u>108</u>	<u>183</u>

Blind Persons age 16 and upwards resident in:—

	M	F	Total
Residential accommodation provided under Part III of the 1948 Act (viz. Sect. 21)—			
(a) Homes for the Blind	12	17	29
(b) Other Homes	3	5	8
Other Residential Homes	—	6	6
Mental Hospitals	5	7	12
Mental Deficiency Institutions	4	2	6
Chronic Wards of Hospitals	11	10	21
	<hr/> 35 <hr/>	<hr/> 47 <hr/>	<hr/> 82 <hr/>

LABORATORY FACILITIES

The Royal Cornwall Infirmary, Truro, Pathological Department, under the charge of Dr. F. D. M. Hocking continues to carry out the chemical analysis of water, sewage effluent samples, etc., which is beyond the scope of the free service provided by the Public Health Laboratory Service.

Specimens of water and food, etc., are sent to the Laboratory of the Public Analyst, Dr. H. E. Cox, at 11, Billiter Square, London, E.C.3.

INSPECTION AND SUPERVISION OF FOOD

The following is the report of the Chief Inspector under the Food and Drugs Acts, for the year ended 31st December, 1950:—

During the year 1,725 samples of food and drugs were taken.

	Milk	Others	Total
Number submitted for Analysis ...	63	545	608
Number tested on Gerber	1,064	53	1,117
Number certified adulterated	28	10	38

Action was taken in respect of the adulterated samples as follows:—

Proceedings	...	7
Cautions	...	4
Referred to Agricultural Adviser	...	20
Referred to Ministry of Food	...	1

Particulars of the 1,725 samples taken are shown in the following table:—

Name of Sample		Number	Number adulterated or not up to standard
Milk	...	1,127	28
Ice Cream	...	54	—
Sausages	...	33	2
Meat and Fish Products	...	23	1
Butter	...	25	2
Lard and Cooking Fat	...	14	—
Margarine	...	2	—
Suet	...	17	—
Cake, Pastry and Pudding Mixtures	...	61	1
Sauces, Soups and Vinegar	...	25	—
Herbs, Spices and Condiments	...	48	2
Flour	...	1	—
Flavourings and Essences	...	22	—
Fruit Juices and Cordials	...	29	—
Tea	...	12	—
Coffee and Coffee Essence	...	22	—
Other Beverages	...	8	—
Condensed and Malted Milk	...	13	—
Baking Powder	..	11	—
Jam, Marmalade and Lemon Curd	...	36	—
Gelatine and Jelly	..	21	—
Honey	...	3	—
Confectionery	...	38	—
Potato Crisps	...	11	—
Drugs	...	13	—
Saffron	...	1	—
Ground Almonds	...	11	—
Dessicated Coconut	...	4	—
Fruit and Vegetables (Tinned)	...	12	—
Bread	...	2	1
Cheese	...	1	—
Vitanut Flakes	...	1	—
Cut Peel	...	2	—
Dripping	...	1	—
Milk Whipping Compound	...	1	—
Wines and Spirits	...	6	—
Synthetic Cream	...	1	—
Mincemeat	...	9	1
Chocolate Spread	...	1	—
Icing	...	2	—
Dried Egg	...	1	—
		<hr/> 1,725 <hr/>	<hr/> 38 <hr/>

SANITARY CIRCUMSTANCES

REPORT OF COUNTY SANITARY OFFICER

The following is a summary of the work carried out during the year:—

Pasteurising Plants and other dairy premises inspected	...	...	246
Works of Sewerage and Sewage Disposal inspected	...	...	78
Manufactories and trade premises visited	...	...	9
Visits in relation to works of water supply	...	...	22
Visits to school premises	...	...	311
Visits to Agricultural Camps and Hostels	...	...	28
Ministry of Health Inquiries attended	...	...	12
Samples of water submitted for examination	...	...	183
Samples of Pasteurised Milk submitted for examination	...	...	222
Samples of school milk submitted for examination	...	...	247
Samples of milk submitted for biological examination	...	...	38
Samples of sewage effluent submitted for examination	...	...	44
Samples of river water submitted for examination	...	...	11

MILK—SPECIAL DESIGNATIONS

Pasteurised Milk

The Milk (Special Designations) Act, 1949, has been repealed by the Food and Drugs (Milk, Dairies and Artificial Cream) Act, 1950, which also repeals certain sections of the Food and Drugs Act, 1938, and the Food and Drugs (Milk & Dairies) Act, 1944.

This Act comes into operation on the 1st January, 1951, and re-enacts, with the necessary amendments, the aforementioned provisions repealed by the Act.

The County Council, as the Food & Drugs authority, are now the licensing authority for the granting of Dealers' (Pasteurisers') licences authorising the use of the special designation "Pasteurised" in relation to milk pasteurised on the premises of the applicant, and the responsibility for the taking of samples and the inspection of premises has been placed upon the licensing authority in order to ascertain if the conditions of the licence are being and will be complied with.

Licences have been granted in respect of nine premises throughout the County for the pasteurisation of milk. These deal with upwards of 120,000 gallons of milk per day, of which approximately 70,000 gallons per day are pasteurised. The bulk of the remainder is brine cooled and sent to the London market.

Of these plants, the methods adopted for pasteurising the milk are, six by the High Temperature Short Time (H.T.S.T.) process in which the milk is retained at a temperature of not less than 161° Fah., for at least 15 seconds and immediately cooled to a temperature of not more than 50° Fah. and three by the Positive Holder process in which the milk is retained at a temperature of not less than 145° Fah. and not more than 150° Fah. for at least 30 minutes and immediately cooled to a temperature of not more than 50° Fah.

During the year 246 inspections of these dairies were made and 222 samples of milk taken and submitted for Phosphatase and Methylene Blue examination with the following results:—

No. of Samples	Phosphatase Test		Methylene Blue Test	
	Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory
222	217	5	220	2

Unsatisfactory samples are followed up, and further samples taken after advice has been given on the possible cause of failure of the sample to comply with the standard laid down. A report is made to the Area Milk Officer of the Ministry of Food of any sample failing to comply with the test and a monthly report on all samples is sent to the Ministry.

The results of the examination of samples are furnished to the Managers of Creameries and to the Medical Officers and Sanitary Inspectors of the district in which the creameries are situated.

Samples of pasteurised milk have been taken regularly by the Food & Drugs Department and of 366 samples taken during the year the average fat content was 3.8% and non-fatty solids 8.8%.

MILK IN SCHOOLS SCHEME

The supervision of the Milk in Schools Scheme has been continued throughout the year and 247 samples of milk delivered to the schools have been taken and submitted for examination with the following results:—

Grade of Milk				Satisfactory	Unsatisfactory	Total
Pasteurised	...	...	...	115	14	129
Tuberculin Tested	...	...	...	37	19	56
Accredited	...	...	...	9	3	12
Ordinary	...	...	...	30	20	50
All Grades	...	...	...	191	56	247

In the case of unsatisfactory samples of milk delivered to the school direct from the farm and in cases of T.T. and Accredited milk, the County Milk Production Officer of the Ministry of Agriculture & Fisheries is notified and asked to investigate conditions at the farm and methods of production. Other cases are investigated by your Sanitary Officer.

Most of the milk is supplied in one-third pint bottles and straws are provided. Where the milk is supplied in bulk and beakers used for drinking, the methods of cleansing the beakers and other utensils are investigated.

The conditions under which the milk is received, stored and distributed at many of the schools leaves much to be desired.

Bottled Milk is delivered in metal crates and deposited at the school gates and is liable to contamination. Bottled and bulk milk is, in many cases, deposited in the cloak rooms and is left there until it is distributed for consumption. The milk is often placed on the pipes of the school

heating system to "take off the chill" thereby encouraging the rapid multiplication of any bacteria present and accelerating souring of the milk.

Beakers are rinsed in cold water and left to dry because hot water is not available.

Where schools have canteens and these are in close proximity to the schools, the milk should be delivered to the canteen and the canteen staff be responsible for the distribution of the milk and the cleansing and sterilization of beakers and other utensils.

In other cases the milk should be delivered to the school and means provided for storage in a cool place until it is consumed and provision made for the proper cleansing of beakers.

All bottles, after use, should be rinsed in cold water, turned upside down in the crate and left ready for collection.

The following table shows the grade of milk supplied to the schools at the end of 1949 and at the end of 1950.

Grade of Milk			31st December 1949	31st December 1950
Pasteurised	...	...	269	329
Tuberculin Tested	...	...	47	30
Accredited	...	...	15	2
Ungraded	...	...	39	12
Dried Milk	...	...	4	1
No. of Schools ...			374	374

Samples of milk from all sources supplying ungraded or accredited milk to schools have been taken and submitted for biological examination. All samples proved to be free of tubercle bacilli.

Four samples of milk were also taken from the Bodmin Mental Hospital Farm and these also proved to be negative for both tubercle bacilli and brucella abortus.

The school milks are also regularly sampled by the Food & Drugs Department and the average analysis of 192 samples taken during the year showed fat content 3.80% and solids not fat 8.88%.

WATER SUPPLIES IN SCHOOLS

A sanitary survey of all the schools in the county where the water supply is not obtained from public mains was carried out in 1948 and samples of the water taken and submitted for both chemical analysis and bacteriological examination.

Since this survey was completed all these sources of supply have been kept under observation and regular samples taken and submitted for bacteriological examination.

During the year 161 samples have been taken from Schools and Canteens of which 95 were satisfactory and 66 unsatisfactory.

A number of the unsatisfactory samples were taken from alternative sources with a view to their being used in lieu of existing unsatisfactory sources of supply.

The Secretary for Education is notified of all unsatisfactory samples and if the source of supply is also a public supply the Medical Officer of Health and the Sanitary Inspector of the district in which the school is situated are notified and asked to cause an investigation to be carried out.

As a result of these representations the following works or precautions have been or are being carried out:—

Schools connected to public mains	...	9
Alternative sources being sought	...	4
Wells cleaned out or repaired	...	3
Storage tanks cleaned out	...	2
New service pipes installed	...	1
Sinking of new wells under consideration	...	2
Defective drainage relaid	...	1
Water being boiled	...	19

At many of the schools water for drinking is being carried from distant sources of supply and stored in containers at the school. Many of the containers are unsuitable, they are left in the cloakrooms without covers, an enamel mug is used for drinking and may be used by a number of children without being washed.

Although samples taken from the source may prove on examination to be satisfactory, long storage at the school under conditions which cannot be regarded in all cases as satisfactory, renders the water unsuitable for drinking.

Where public mains supplies are brought to within reasonable distance of the school by the local authority or other water undertaking every effort should be made to connect the school to such supply.

With this in view the Education and Architect's Departments of the County Council are notified of all schemes of water supply submitted to the County Council, in accordance with the Rural Water Supplies and Sewerage Act, 1944, for their observations.

ICE CREAM (HEAT TREATMENT) REGULATIONS, 1947

The above regulations came into operation on the 1st May, 1947, and placed upon District Councils and Borough Councils the responsibility of the registration and supervision of premises where ice-cream is manufactured and sold, and also the duty of taking samples.

A temporary standard with which premises should comply was established as a result of conferences between the Cornwall branches of the Sanitary Inspectors' Association and The Ice Cream Alliance and this standard is still in force and is applied throughout the county.

A Joint Committee has, however, been set up between the Sanitary Inspectors' Association and The Ice Cream Alliance with a view to establishing a national standard relating to premises and plant.

Under the Regulations there has been prescribed no legal standard of cleanliness for ice-cream, but a form of Methylene Blue Test has been

recommended by the Minister of Health, and this examination has, in fact, been adopted as the unofficial test. According to the quality of the ice-cream, four grades have been set up, numbered one to four, and the Minister suggests that if, out of the four grades recommended, ice-cream consistently fails to reach grades one and two it would be reasonable to regard this as indicating defects of manufacture or handling which call for further investigation.

At the end of the year no legal standard had been prescribed for fat content of ice-cream but ice-cream manufacturers throughout the country have generally agreed to a minimum fat content of 2.5% following the receipt of additional supplies of sugar and, in certain cases, fats.

Under the Food Standards (Ice-cream) Order 1951, a legal standard has now been prescribed that the ice-cream shall contain not less than 5% fat, 10% sugar and $7\frac{1}{2}\%$ milk solids other than fat. This Order comes into operation on the 1st March, 1951.

During the year 1950, 1,038 samples were submitted to the County Laboratory for the Methylene Blue Test.

With regard to the fat content of ice-cream, 54 samples have been taken by the Food & Drugs Department all of which contained more than 2.5%. The fat contained in these samples varied from 3.1% to 13.26%.

The results of the samples examined for Methylene Blue are shown in the following table:—

Local Authority	Hot Mix Grade				Cold Mix Grade				Unknown Grade				Total Samples
	1	2	3	4	1	2	3	4	1	2	3	4	
Falmouth B.	...	—	—	—	—	—	—	—	44	54	45	7	150
Fowey B.	...	1	2	—	—	1	2	—	1	1	5	2	15
Helston B.	...	33	26	20	10	7	—	—	—	2	—	1	99
Launceston B.	...	1	4	7	2	2	1	—	—	2	3	2	24
Liskeard B.	...	—	1	—	—	7	—	—	—	18	10	3	39
Penryn B.	...	—	—	—	—	—	—	—	—	1	2	7	12
Penzance B.	...	11	6	10	1	—	—	—	1	13	14	13	75
St. Ives B.	...	4	5	3	2	—	1	—	—	—	—	—	15
Truro City	...	—	—	—	—	—	—	—	—	19	8	13	49
Camborne- Redruth U.D.	...	6	4	2	4	—	—	—	—	9	6	9	42
Looe U.D.	...	8	4	13	13	—	—	—	—	5	10	4	59
Newquay U.D.	...	4	5	10	9	—	1	—	—	—	—	—	29
St. Austell U.D.	...	23	17	10	15	2	1	—	—	—	—	—	68
Kerrier R.D.	...	26	39	49	6	5	9	5	—	3	4	6	153
Launceston R.D.	...	15	9	10	4	5	1	—	—	4	1	—	50
Liskeard R.D.	...	3	4	12	9	—	—	—	—	—	—	4	34
Truro R.D.	...	—	—	—	—	—	—	—	—	22	27	40	103
West Penwith R.D.	...	2	3	1	2	—	11	3	—	—	—	—	22
Totals	137	129	147	77	29	27	8	1	141	142	151	49	1,038

VOLUNTEER AGRICULTURAL CAMPS AND HOSTELS

By the end of the year most of these camps had been closed and the equipment disposed of, but during the summer months 12 camps and hostels were established throughout the county. These were inspected regularly and samples of water taken from camps not being supplied from public mains and submitted for bacteriological examination.

The camps were inspected for general sanitary conditions, including water supply, sewerage and sewage disposal, overcrowding of rooms, provision for ablutions, bathing, sanitary conveniences, recreation, laundry. &c. Samples of sewage effluents were taken regularly and submitted for examination.

Reports were made to the Hostels Officer of the Cornwall Agricultural Executive Committee on the general condition of the camps and hostels and the results of the examination of samples of water and sewage effluents were sent to him.

Situation of camp	No. of Volunteers (accommodation)		
	Male	Female	Both Sexes
Volunteer Agricultural Camps			
Helston—Dry Tree	—	—	70
St. Just in Roseland—Place House, St. Anthony	—	—	100
Truro—Polwhele	—	—	80
Newquay—Trebelzue	40	40	—
Launceston—Pennygillam	20	20	—
Saltash—Hatt	40	40	—
European Volunteer Camps			
Callington—Moss Side	45	—	—
Pelynt—Trelawne Barton	24	—	—
Truro—Treliske	90	—	—
Hayle—St. Erth	38	—	—
St. Gennys—Wainhouse Corner	29	—	—
Camelford—St. Teath	40	—	—

MINISTRY OF HEALTH INQUIRIES

The following inquiries held by the Ministry of Health within the County were attended during the year:—

1. **St. Austell R.D.C.**—25th January, 1950, at the Victory Hall, Indian Queens, in respect of a temporary scheme of water supply for Indian Queens, Fraddon and Summercourt, until such time as the water from the De Lank Scheme is available to these areas. The Scheme was estimated to cost £33,081.
2. **St. Austell R.D.C.**—26th January, 1950, at the Town Hall, Grampound, in connection with an application by the Rural District Council to borrow the sum of £7,770 for works of sewerage already carried out and sewerage and sewage disposal works proposed to be carried out for the village of Grampound.

3. **Camelford R.D.C.**—11th April, 1950, at the Rural District Council Offices, Camelford, in respect of schemes of sewerage and sewage disposal at St. Teath and Delabole, respectively.

The Scheme for St. Teath was originally estimated to cost £6,388 and that for Delabole £22,685, but the cost of the works carried out up to the time of this informal inquiry indicated that the actual cost would exceed the estimate in both schemes.

4. **Falmouth Borough & Truro R.D.C.**—25th April, 1950, at the Municipal Buildings, Falmouth, in connection with an application by the Falmouth Borough Council for consent to borrow the sum of £144,826 for works of water supply in the Borough of Falmouth and the Parish of Mylor in the Truro Rural District.
5. **Stratton R.D.C.**—27th April, 1950, at Kilkhampton, in connection with an application by the Rural District Council to borrow the sum of £15,000 for works of sewerage and sewage disposal in the Parish of Kilkhampton.
6. **Camelford R.D.C.**—28th April, 1950, at the Camelford Rural District Council Offices to discuss the progress of the scheme of sewerage and sewage disposal for Boscastle. It was thought that the final account for this work would exceed the contract figure of £15,000 by 25%.
7. **South East Cornwall Water Board.**—11th July, 1950, at the offices of the St. Germans Rural District Council, Saltash, in connection with an application by the Water Board for an Order under the Defence Regulation 56 (1B) relaxing the obligations imposed by Section 38 of the South East Cornwall Water Board Act, 1936.
8. **Liskeard R.D.C.**—12th July, 1950, at the Wesleyan School, Tremar, St. Cleer, in respect of an application by the Rural District Council for consent to borrow the sum of £18,500 for works of sewerage and sewage disposal in the Parish of St. Cleer.
9. **Camelford R.D.C.**—18th October, 1950, at the Rural District Council Offices, Camelford, respecting the schemes of sewerage and sewage disposal for Treknow and St. Breward, estimated to cost £6,350 and £19,740 respectively. It was considered that these estimates should be increased by 20%.
10. **West Penwith R.D.C.**—24th October, 1950, at the offices of the Rural District Council, Penzance, in respect of the scheme of sewerage and sewage disposal for St. Buryan and the Rural District Council's application to borrow the sum of £8,000 for this purpose.
11. **West Penwith R.D.C.**—25th October, 1950, at the Men's Institute, Sennen Cove, in respect of an application by the Rural District Council for consent to borrow the sum of £17,127 for works of sewerage and sewage disposal in the Parish of Sennen.

RIVERS POLLUTION PREVENTION ACTS

The responsibility of the County Council for the administration of the above Acts was passed to the Cornwall Rivers Board under the River Boards Act, 1948.

The following work in respect of rivers pollution was, however, carried out before the transfer of powers took place on the 1st October, 1950.

Sewage Disposal—Regular routine samples of effluents were taken from sewage works throughout the county during the first nine months of the year and submitted for examination. These works included those of Local Authorities, Military, Naval and R.A.F. Service Stations, together with Agricultural Camps and Hostels.

The results of the examination of all samples have been sent to representatives of these Authorities, together with observations on the condition of the respective works. Many interviews have taken place and much advice given on the steps to be taken to improve the effluent from many of these works. During the period under review 45 samples were taken with the following results:—

Authority			No. of Samples	Satisfactory	Unsatisfactory
Local Authorities	...	...	40	21	19
Service Stations	...	...	2	2	—
Agricultural Camps & Hostels	...	...	1	1	—
West Cornwall Hospital Management Committee	...	...	2	2	—

River Survey

A survey of the Hayle River and its tributaries was carried out and 11 samples of the river water taken and submitted for examination.

The survey included the sampling of the main river and 5 of its tributaries.

The river rises near Crowan and follows a course through Clowance Wood and thence to Townshend, Relubbus and St. Erth to discharge into the sea in St. Ives Bay.

The river during the survey appeared clean and comparatively free from suspended solids indicating that little or no disturbance had occurred as a result of the rain falling at the time of the survey.

Of the main river and its tributaries generally the pathologist states:—

“The findings are all very satisfactory, this being a river of quite reasonable cleanliness. It starts rather doubtfully at its source at Crowan, but rapidly purifies itself, and at Clowance Wood can be classified as a very clean river. The tributary at Relubbus is fairly clean, but not of such good quality as the main stream, although after the confluence the combined rivers are satisfactory and can be classified as very clean. These conditions are maintained until the river is joined by the canal at Angarrack; this canal is rather badly polluted. The condition of the two lower tributaries is satisfactory.”

RATS AND MICE (DESTRUCTION) ACT, 1919.
INFESTATION ORDER, 1943.

Under the above Act and Order the County Council continued to carry out the work in the rural districts of Camelford, Launceston, Stratton and West Penwith, these authorities having refused or relinquished delegated powers.

The Prevention of Damage by Pests Act, 1949, however, placed the responsibility for the administration of this Act upon district councils. The Act came into operation on 1st April, 1950.

The services of the three rodent operators employed by the County Council were therefore terminated on the 31st March, 1950, and the equipment used by them was sold by auction.

The following table shows the work carried out during the three months ending 31st March:—

Survey

No. of premises visited	...	1,469
Total infestations found	...	529
Infestations in private premises	...	398
Infestations in business premises	...	131
Infestations in refuse tips	...	4

Operations

Total effective man-hours	...	1,112
Total ineffective man-hours	...	606
No. of premises treated by poison	...	496
No. of pre-baits	...	5,569
No. of poison baits	...	1,913
No. of post baits	...	1,276
Estimated number of rats and mice destroyed by poison		1,816
No. of premises treated by traps	...	9
No. of rats and mice destroyed by traps	...	19
No. of rats and mice destroyed during period	...	1,835
No. of minor infestations treated	...	463
No. of major infestations treated	...	25
No. of reservoir infestations treated	...	—

Refuse tips are treated with "Cymag" gas and, as this necessitates the sealing of rat runs, it is difficult to estimate the number of rats destroyed by this method.

Private premises were treated free of charge, but a charge was made in respect of all business premises, this being based on the size of the premises and the degree of infestation.

The amount recovered during 1950 for the treatment of business premises was £126.15s.od.

WATER SUPPLIES

The County at the present time is being served by 32 statutory and 2 non-statutory water undertakers as follows:—

Statutory Undertakers

- (a) Three Borough and Urban Districts with limits of supply greater than the local government area:—Falmouth (Borough); Liskeard (Borough); and Bude-Stratton (U.D.).
- (b) Two Joint Water Boards with statutory powers:—South East Cornwall Water Board and North Cornwall Joint Water Board.
- (c) Five Companies with statutory powers:—Bodmin Water Works Company; Camborne Water Company; Helston and Porthleven Water Company; Newquay and District Water Company and Truro Water Company.
- (d) Six Boroughs operating under Public Health Acts:—Fowey; Launceston; Lostwithiel; Penzance; St. Ives and Saltash.
- (e) Six Urban Districts operating under Public Health Acts:—Camborne-Redruth (Redruth and St. Day and Lanner Wards only); Looe; Padstow; St. Austell; St. Just and Torpoint.
- (f) Ten Rural Districts:—Camelford; Kerrier; Launceston; Liskeard; St. Austell; St. Germans; Stratton; Truro; Wadebridge and West Penwith.

Non-Statutory Undertakers

Two Companies:—Kelly Bray and District Water Company; and Wide-mouth Water Supply Company.

At the present time, in the twelve Boroughs, about 96% of the population are on piped supplies. In the eight Urban Districts about 84% and in the ten Rural Districts less than 40% are on piped supplies.

For the purposes of future supplies the County has been divided into five supply areas, namely, South East, South West, North East, North West and Mid-Cornwall.

South East — This area includes the Boroughs of Launceston, Liskeard and Saltash; the Urban Districts of Looe and Torpoint and the Rural Districts of Launceston, Liskeard and St. Germans.

This area which covers some 370 square miles is supplied mainly by the Plymouth Corporation (for Saltash Borough), the Boroughs of Launceston, Liskeard, the Urban District of Torpoint and the South East Cornwall Water Board.

To supplement present supplies a scheme has been prepared by Messrs. Ivory & Partners for the extension and utilisation of existing sources of supply for a larger area at an estimated cost of £656,380. The South East Cornwall Water Board are to take water from the River Tiddy and provide additional filtration and treatment plant at an estimated cost of £37,750 in order to meet the increased demand upon the Board's resources.

South West — This comprises the Boroughs of Penzance and St. Ives, the St. Just Urban District and the Rural District of West Penwith.

This area covers some 100 square miles. The two Boroughs are supplied by their own schemes, the Urban and Rural Districts having small local schemes for parts of the districts only.

A scheme has been prepared by Mr. J. H. Blight, Borough Surveyor of Penzance, estimated to cost £300,000 for supplying practically the whole of the Lands End Peninsula except the Borough of St. Ives. The scheme is to impound the waters of the Drift Stream, at present supplying part of Penzance, by the construction of a dam to a height of 264 feet and capable of being raised to 271 feet. The capacity of the reservoir would be 125 million gallons and is estimated to have a net daily yield of 1,325,000 gallons. Trial holes have been sunk on the site proposed for the dam and these have shown that it is a practicable proposition to construct such a dam on this site.

North East — This comprises the Bude-Stratton Urban District and the Stratton Rural District and covers an area of about 95 square miles.

The Urban District is supplied with water from an impounding reservoir on the upper reaches of the River Tamar and the Rural District by small local schemes but relies mainly on wells and springs.

It is proposed to construct a new impounding reservoir sited further upstream than the existing reservoir which it is proposed to abandon owing to the condition of the present earthen embankment.

Trial holes have been sunk on the site proposed for the new dam and reported upon satisfactorily.

The capacity of the reservoir would be sufficient to supply the whole of this area; the water for the northern part of the area would, however, have to be pumped to a storage reservoir from which it would gravitate.

The cost of the scheme is estimated to be £230,000.

North West — This comprises the Camelford Rural District with a total area of about 82 square miles.

Part of the area is supplied by the North Cornwall Joint Water Board which also supplies the four parishes of St. Minver Lowlands, St. Minver Highlands, St. Endellion and St. Kew in the Wadebridge Rural District, the remainder of the Camelford Rural District being supplied by small local schemes, wells and springs.

The present proposal is for the construction of an impounding reservoir at Crowdy Marsh, the existing source of supply for the North Cornwall Joint Water Board, to supply the greater part of the Rural District with the exception of St. Breward and St. Clether.

Mid-Cornwall — This area comprises the City of Truro, the Boroughs of Bodmin, Helston, Falmouth, Penryn, Fowey and Lostwithiel, the Urban Districts of Camborne-Redruth, Padstow, Newquay and St. Austell, and the Rural Districts of Kerrier, St. Austell, Truro and Wadebridge. The total area involved is about 670 square miles.

The water undertakers now supplying water to parts of this area include:—

The Boroughs of Falmouth, Fowey and Lostwithiel, The Urban Districts of Camborne-Redruth, Padstow, St. Austell, The Rural Districts of Kerrier, St. Austell, Truro and Wadebridge together with the Truro Water Co., The Newquay Water Co., The Helston & Porthleven Water Co., the Camborne Water Co., the Bodmin Water Co., and the North Cornwall Joint Water Board.

The Falmouth Borough also supplies Penryn Borough and parts of Kerrier and Truro Rural Districts.

The Bodmin Water Co. supplies the Borough of Bodmin and a few houses in the parishes of St. Breward and Helland.

The Borough of Helston and parts of Kerrier Rural District are supplied by the Helston & Porthleven Water Co.

The Boroughs of Fowey and Lostwithiel are supplied from local sources.

Truro City is supplied by the Truro Water Co. which also supplies part of Truro Rural District.

The Camborne-Redruth Urban District is supplied in part by the local authority and in part by the Camborne Water Co.

Padstow Urban District relies at present on its own source which requires supplementing.

Newquay Urban District is supplied by the Newquay Water Co.

St. Austell Rural District has only one parish with piped supply; of the remaining sixteen parishes there are eight which are partly served by piped supply and eight that have to rely on springs and wells.

The North Cornwall Joint Water Board supplies four parishes in the Wadebridge Rural District, but the remainder of the Rural District, with the exception of Wadebridge which is supplied from local resources, has to rely upon springs and wells.

With a view to supplying water to those parts of the Mid-Cornwall area now without piped water supplies and supplementing existing supplies of certain district councils, it is proposed to take water from the River De Lank on Bodmin Moor and for this purpose to construct:—

- (1) an impounding reservoir on the De Lank River with a top water level of about 824 feet A.O.D. having a capacity of approximately 2,000 million gallons and a water area of about 350 acres. The height of this main dam would be about 65 feet above stream bed and there would have to be a subsidiary dam about 22 feet above ground level to prevent over-spill to the Warleggan River.
- (2) Treatment works and attendant's house immediately below the reservoir and a main pipe line from the treatment works to Stithians in the Kerrier Rural District, from which branches will be taken to feed practically the whole of Mid-Cornwall including the Lizard area.

A committee known as the Mid-Cornwall Advisory Committee has been established. This Committee is comprised of representatives of all the constituent authorities and water undertakings, together with representatives of the County Council, and steps are now being taken in the preparation of the necessary documents to enable application to be made to the Ministry for the formation of a Joint Board, for the control and administration of this source of supply.

Wadebridge R.D.C. have had prepared a comprehensive scheme based on an intake on the De Lank River for the supply of the Rural District and neighbouring water authorities under the Wadebridge Rural District Council Act, 1937—44. This scheme would later link up with the impounding reservoir proposed for Mid-Cornwall.

Since the coming into operation of the Rural Water Supplies and Sewerage Act, 1944, there have been 72 schemes of water supplies submitted by the local authorities and other water undertakings for the County Council's observations, the total estimated cost of these being £2,671,532, of which 32 schemes were submitted during the year 1950 and were estimated to cost £1,662,424. 39 schemes estimated to cost £1,107.108 had been completed or the works were in progress at the end of the year.

In the case of 15 schemes estimated to cost £82,406 the Ministry of Health decided not to make a grant, but in respect of 18 other schemes approved lump sum grants totalling £77,270 and in one case a grant of £137.10s.od. per annum for the period of the guarantee.

The County Council approved grants in respect of 15 schemes amounting to £2,843.8s.3d. per annum for 30 years and in respect of 2 schemes grants amounting to £863.16s.od. per annum for 12 years.

Details of the schemes which have been submitted to the County Council since the coming into operation of the above Act are given in the following table:—

District Council or Water Undertaking	Particulars of Scheme	Est. Cost £	Remarks
Penzance Borough	Penzance Borough St. Just U.D.	300,000	Trial holes completed and site for dam proved satisfactory
	West Penwith R.D. Gulval	2,000(a)	Works completed
	*Boscathnoc-filters and pumping plant	8,900(a)	—
St. Ives Borough	*Halsetown and Rural areas from Amalveor	14,003	—
Camborne-Redruth U.D.	St. Day and Carharrack	15,524	Works completed
	Lanner and Scorrier	9,367	Works completed
	Troon; Pencoys; Carnkie; Bolenowe; Knave-go-by; Treskillard; Four Lanes; Piece and Boseleack	43,565(a)	Works in progress
Newquay U.D.	Crantock	5,738(a)	Works completed
	Tregurrian	1,350	Works completed

District Council or Water Undertaking	Particulars of Scheme	Est. Cost £	Remarks
Camelford R.D.	Helstone; Newhall Green; Trewalda and Polstraul	7,633	Works in progress Ministry Grant £3,900 C.C. Grant £198.1s.4d p.a. for 30 years
	St. Breward	461	—
	Boscastle	270	—
	Boscastle (new road)	1,183	Ministry Grant £280 C.C. Grant £14.4s.6d p.a. for 30 years
	*Mt. Camel	365(a)	—
	*Trefrew Road; Dark Lane; Camelford and St. Breward	675(a)	Works completed
	*Trevia	1,861	—
	Trewennack	2,944(a)	Works completed
Kerrier R.D.	Grade Ruan and Landewednack	51,496	Works completed
	Godolphin Cross and Breage	8,032	Works completed Ministry Grant £1,500. C.C. Grant £76.3s. 8d. p.a. for 30 years
	Budock Water, Mawnan, Mawnan Smith, Trebarworthal, Porth Navas	38,291	Ministry Grant £8,500. C.C. Grant £431.13s. 8d. p.a. for 30 years
	*Manaccan, St. Anthony. St. Martin- in-Meneage, St. Keverne, Coverack, Cury, Gunwalloe	121,880	—
	*Boskenwyn	6,685	—
	*Manhay	2,504	—
	*Breage and District	76,341	—
	*Leedstown, Townshend and Horsedowns	11,000	—
	*Stithians (Impounding Scheme)	306,000	—
			—
	*South Petherwin	3,800	
	*Egloskerry and Langore	6,500	Approved by Ministry of Health
Liskeard R.D.	*Regional Scheme for parts of S.E. Cornwall	656,380	Works in progress
St. Austell R.D.	Golant	1,050	Works completed
	Hewas Water	637	Works completed
	Roche	488	Works completed
	De Lank extensions from Wadebridge	112,000	—
	Lower Sticker and Polgooth	2,400	Works completed
	St. Mawgan and Trenance	35,000	Works in progress Ministry Grant £11,000 C.C. Grant £558.13s. 2d. p.a. for 30 years
	Treviscoe and Trerice	5,600(a)	Works completed

District Council or Water Undertaking	Particulars of Scheme	Est. Cost £	Remarks
	Indian Queens, Fraddon and Summercourt	35,000	Ministry Grant £24,000. C.C. Grant £592. 10s.8d. p.a. for 30 years.
	*Curyan Vale	1,152(a)	Works nearing completion
St. Germans R.D.	Gunnislake and Hatches Green	621(a)	Works completed
	Narkurs	1,057(a)	Works completed
	St. John and Millbrook	2,340(a)	Works completed
	Tredis	1,200	—
	Horsepool	300	—
	Fursdon	500	Works completed
	Hessenford	3,175(a)	—
	*Quethiock and Treweese Cross	450	Works completed
	*Lower Kelly, Calstock	630	Works completed
Stratton R.D.	*Grimscoth and Hershams	11,750	—
	*St. Gennys and Crackington Haven	20,000	—
Truro R.D.	Tregony, etc.	160,000	Works in progress
	Perranzabuloe	2,385	Works completed. Ministry Grant £800. C.C. Grant £40.12s. 8d. p.a. for 30 years
	Mitchell	2,200	Works completed. Ministry Grant £340. C.C. Grant £17.5s.4d. p.a. for 30 years
	Shortlanesend	2,500(a)	Works completed
	Newlyn East	15,050	Works completed. Ministry Grant £4,000. C.C. Grant £203.3s. 0d. p.a. for 30 years
	Perranporth (Augmentation Scheme)	23,600	Works completed. Ministry Grant £3,800. C.C. Grant £192.19s. 10d. p.a. for 30 years
	*Perranporth (Augmentation Scheme)		
	Filtration Plant	4,450	Ministry Grant £1,450
	Tresillian	5,500	Works completed. Ministry Grant £137. 10s.0d. p.a. for period of guarantee. C.C. Grant £137.10s.0d. p.a. for 12 years
	Probus	1,150	Works completed. Ministry Grant £650. C.C. Grant £33.0s. 2d. p.a. for 30 years
	Mylor	27,841	Ministry Grant £4,250. C.C. Grant £215.16s. 10d. p.a. for 30 years
	Tretham Mill and St. Mawes	11,300	Works completed. Ministry Grant £900. C.C. Grant £45.14s. 2d. p.a. for 30 years

District Council or Water Undertaking	Particulars of Scheme	Est. Cost £	Remarks
	*Do. Relaying of existing mains St. Agnes (Wheal Kitty)	4,186 1,774(a)	Works completed Works completed
Wadebridge R.D.	*De Lank Scheme	308,833	—
West Penwith R.D.	Gwincar-Gwithian	32,000	Works in progress. Ministry Grant £7,500. C.C. Grant £726.6s. p.a. for 12 years
	*Goldsithney	1,936	Works in progress
	*St. Buryan	3,375	—
	*Nancledra	3,756	—
	*Canonstown	4,067	—
South East Cornwall Water Board	*River Tiddy Scheme	37,750	—
North Cornwall Joint Water Board	Duplications of mains	32,650	Works completed. Min- istry Grant £3,400. C.C. Grant £172.13s. 6d. p.a. for 30 years
	St. Endellion Reservoir	8,111	Works completed. Min- istry Grant £1,000. C.C. Grant £50.15s. 9d. p.a. for 30 years
	*Extension of Filtration Plant	38,400	

(a) Ministry decided not to make grant

* Scheme submitted during 1950

SEWERAGE AND SEWAGE DISPOSAL

A survey of the sewerage and methods of sewage disposal was carried out in 1945 and details relating to all Sanitary Districts throughout the County were given in the Annual Report for that year.

The methods adopted throughout the County may be summarised as follows:—

Districts	No. of Sea outfalls	No. of Tidal River Outfalls	Outfalls to non-tidal rivers or streams	Sediment- ation and Filtration Works
West Cornwall Hospital Management Committee	—	—	—	2
Boroughs ...	9	31	8	9
Urban Districts ...	8	15	—	19
Rural Districts ...	34	18	18	15
Naval, Military & R.A.F. Camps ...	—	—	—	15
Agricultural Hostels— C.A.E.C. ...	—	—	—	12
Total ...	51	64	26	72

Since the coming into operation of the Rural Water Supplies and Sewerage Act, 1944, there have been 70 schemes of sewerage and sewage disposal submitted by local authorities for the County Council's observations. The total estimated cost of these being £653,359 of which 6 schemes were submitted during 1950 and were estimated to cost £99,007.

14 schemes estimated to cost £145,952 had been completed or the works were in progress at the end of the year.

In the case of 8 schemes estimated to cost £55,737, the Ministry of Health decided not to make a grant but in respect of 6 other schemes approved lump sum grants totalling £33,500.

The County Council approved grants in respect of 6 schemes amounting to £1,701.7s.2d. per annum for 30 years.

Details of the schemes which have been submitted to the County Council since the coming into operation of the above Act are set out in the following table:—

District Council	Particulars of Scheme	Estimated Cost	Remarks
Falmouth Borough	Borough Scheme	57,258	—
Helston „	Extension of Disposal Works	12,000	Works in progress
Liskeard „	Borough Scheme	33,000	—
Penzance „	Gulval	17,000(a)	35% completed
	Alverton	9,800(a)	Works completed
	Sheffield	2,636(a)	Works completed
Truro City	Bodmin Road and Tregurra Lane	3,454	Works completed
	Tresawls Road and Highertown	4,380	Works completed
Bude-Stratton U.D.	Poughill	5,970(a)	Materials ordered. Work not commenced
	Stratton	7,700	Ministry of Health approval received
Newquay U.D.	Crantock	11,053(a)	Works completed
Camelford R.D.	Bossinney	6,492	Works Completed Ministry Grant £2,000 C.C. Grant £101.11.6 p.a. for 30 years
	Boscastle	17,077	95% completed Ministry Grant £5,500 C.C. Grant £279.6.6 p.a. for 30 years
	Trevenna	19,994	Works completed Ministry Grant £6,500 C.C. Grant £330.2.2 p.a. for 30 years
	St. Breward	11,100	—
	St. Teath	9,186	80% completed Ministry Grant £4,000 C.C. Grant £203.3.0 p.a. for 30 years
	Trewassa and Tremail	2,000	—

District Council	Particulars of Scheme	Estimated Cost	Remarks
	Delabole	25,097	90% completed Ministry Grant £9,000 C.C. Grant £457.1.8 p.a. for 30 years
	Trevia	3,700	—
	Tregoodwell	1,000	—
	Trewarmett	2,500	—
	Treknow	3,600	Ministry Inquiry 18.10.50
	Trevalga	2,100	—
	Camelford	2,900	—
	Helstone	2,800	—
	Penpont & Lower Lank	4,400	—
	*Tintagel & Bosinney (Extensions)	304	—
Kerrier R.D.	Praze an Beeble	10,000	—
	Ruan Minor & St. Ruan	13,800	—
	St. Keverne and Porthoustock	14,000	—
	Constantine & Brillwater	16,800	—
	Mabe	9,600	—
	Leedstown	8,000	—
	Manaccan	4,560	—
	Mawnan Smith	11,600	—
Launceston R.D.	Altarnun and Five Lanes	9,800	} Ministry of Health Inquiry held
	North Hill	6,100	
	South Petherwin & Daws House	13,550	
	Venterdon and Stoke Climsland	13,600	
	Lewannick	9,420	
	Lawhitton	3,650	
	Egloskerry & Hole	7,100	
	Tregadillet	5,000	
	Coads Green	4,500	
	Warbstow	3,000	
	Canworthy Water	5,900	—
Liskeard R.D.	Dobwalls	11,516	—
	Crows Nest	1,561	—
	St. Cleer	18,500	Ministry Inquiry 12/7/50 Tenders submitted to Ministry of Health
	Seaton Bridge	4,085	—
	Upton Cross	4,895	—
	Menheniot	8,636	—
	Cheesewring	6,784	—
	St. Neot	7,726	—
St. Austell R.D.	Grampound	4,320	Sewerage completed. Treatment works not yet commenced
	Gorran	2,840	—
	Trewoon and Polgooth	25,470	—

District Council	Particulars of Scheme	Estimated Cost	Remarks
St. Germans R.D.	Seaton	4,783(a)	Works in progress Ministry of Health Inquiry 18.3.49
	Quethiock	1,800(a)	
	St. Germans	6,550(a)	—
	*Callington and Kelly Bray	16,500	—
Stratton R.D.	Widemouth Bay	13,600	—
	Bangors Poundstock	2,115(a)	Work nearing completion Ministry Inquiry 27.4.50. Ministry Grant £6,500. C.C. Grant £330.2.4 p.a. for 30 years
	Kilkhampton	15,000	
	Grimscott, Launcells	2,545	—
West Penwith R.D.	St. Buryan	7,636	Ministry Inquiry 24.10.50
	Sennen:—		
	1. Sennen Cove	17,127	Ministry Inquiry 25.10.50
	2. Sea View Hill	2,577	
	3. Velandreath	7,912	—
	*Goldsithney	10,400	—

(a) Ministry decided not to make grant

* Scheme submitted during 1950

RURAL HOUSING

County Councils are not housing authorities for the purpose of the principal Housing Act of 1936, but by Section 88 of that Act it is the duty of every County Council as respects each Rural District within the County "to have constant regard to the housing conditions of the working classes." This duty is mainly that of co-operating with and assisting local authorities.

The Rural Housing Sub-Committee of the Central Housing Advisory Committee in the Third Report issued in 1944 recommended the setting up of a Joint Advisory Committee for each County in England and Wales representative of all Rural District Councils in the County, the County Council and any other persons representative of bodies interested in housing within the County whom the Committee thought fit to co-opt.

Such a Committee has been established in the County and is known as the Cornwall Rural Joint Advisory Housing Committee. The first meeting was held on the 23rd March, 1945.

A Technical Standards Sub-Committee was also set up and it was resolved to recommend:—

"That two standards of housing conditions be adopted—

- (i) as the standards ultimately expected to be aimed at, and
- (ii) the standard with which all existing houses shall be made to comply, where practicable, when such houses are dealt with in connexion with the survey to be carried out in all Rural Districts."

These standards were adopted by the Cornwall Rural Joint Advisory Housing Committee at a meeting held at the County Hall, Truro, on the 18th May, 1945, after which copies of the standard were sent to all Rural District Councils and other bodies represented on the Committee.

Housing Survey. Of the ten Rural Districts in the County, one has not yet commenced to carry out the survey as recommended by the Cornwall Rural Joint Advisory Committee. Three local authorities have completed the survey, viz., Camelford, Launceston and Truro Rural Districts. The position throughout the County at the end of the year is shown in the following table:—

Rural District	No. of parishes in Rural Districts	No. of parishes completed	Parishes under survey but not completed	No. of houses inspected	CLASSIFICATION					No. of houses over-crowded	No. of new houses erected	
					Category						By Local Authority	By private enterprise
					1	2	3	4	5			
Camelford	13	13	—	1769	221	651	517	225	155	74	73	17
						By conversion of other buildings						14
Kerrier	21	—	10	170	4	17	49	12	87	—	135	74
Launceston	17	17	—	1376	164	398	661	59	94	9	22	11
Liskeard	21	—	16	578	23	124	263	161	7	—	90	28
St. Austell	17	1	11	1303	305	140	594	2	262	—	257	30
St. Germans	16	—	—	—	—	—	—	—	—	—	294	33
						(Temporary conversions)					37	—
Stratton	19	—	10	91	12	17	27	19	16	—	95	16
Truro	24	24	—	5799	202	424	893	3142	1138	—	205	52
Wadebridge	19	16	2	2596	308	540	541	808	403	2	182	20
West Penwith	17	—	12	1582	440	570	383	58	131	38	40	32
Totals	175	71	61	15267	1679	2881	3928	4486	2293	123	1430	327
					%	%	%	%	%			
					11.0	19.0	25.7	29.4	15.0			

1. Satisfactory in all respects.
2. Minor defects.
3. Requiring repair, structural alteration or improvement.
4. Appropriate for re-conditioning.
5. Unfit for habitation and beyond repair at a reasonable expense.

Housing Acts

The following grants have been made in accordance with the Housing (Financial Provisions) Acts:—

District	Annual Grant	No. of years	Grants previously authorised No. of houses	Grants authorised during 1950 No. of houses	Total No. of houses
	£ s: d.				
Helston Borough	1 10 0	60	17	16	33
Penzance „	1 10 0	60	23	23	46
Bude-Stratton					
Urban	1 10 0	60	4	6	10
St. Austell „	1 10 0	60	2	13	15
Camelford Rural	1 10 0	60	4	4	16
„ „	1 5 0	60	8		
Kerrier „	1 10 0	60	35	37	119
„ „	1 0 0	40	47	—	
Launceston „	1 10 0	60	9	5	16
„ „	1 0 0	40	2	—	
Liskeard „	1 10 0	60	68	60	128
St. Austell „	1 10 0	60	2	34	36
St. Germans „	1 10 0	60	58	7	74
„ „	1 0 0	40	9	—	
Stratton „	1 10 0	60	88	23	111
Truro „	1 10 0	60	121	—	135
„ „	1 0 0	40	14	—	
Wadebridge „	1 10 0	60	8	—	26
„ „	1 0 0	40	18	—	
West Penwith „	1 10 0	60	8	—	35
„ „	1 0 0	40	27	—	
TOTALS			572	228	800

675 houses @ £1.10.0. per annum for 60 years =	£1,012.10.0. per annum
8 houses @ £1. 5.0. per annum for 60 years =	10. 0.0. „ „
117 houses @ £1. 0.0. per annum for 40 years =	117. 0.0. „ „
Total	£1,739.10.0. „ „

TABLE I.

Estimated Population and Total Number of Births and Deaths in each Sanitary District During the Year 1950.

AREA IN ACRES.	SANITARY DISTRICT	ESTI- MATED POPU- LATION 1950	LIVE BIRTHS.								Stillbirths.	DEATHS.									
			Legiti- mate		Illegiti- mate		Total.	Rate.	District Comparability Factor	Under 1 Year.				At all Ages							
			Males	Females	Males	Females				Males		Females	Total.	Rate per 1,000 live births	Males	Females	Total	Rate.	District Compara- bility Factor		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
URBAN.																					
3,312	Bodmin	6,545	19	28	2	2	51	7.79	1.56	..	..	1	1	19.61	32	32	64	9.78	0.89
4,294	Bude-Stratton	5,286	31	21	2	2	56	10.59	1.09	3	3	..	3	53.57	39	48	87	16.46	0.73		
22,062	Redruth	35,800	253	232	17	15	517	14.44	0.99	19	14	6	20	38.68	233	267	500	13.96	0.87		
1,880	Falmouth	16,900	101	123	8	8	240	14.20	1.04	5	5	3	8	33.33	122	98	220	13.02	0.86		
2,979	Fowey	2,198	18	18	2	..	38	17.29	1.10	1	2	..	2	52.63	13	24	37	16.83	0.76		
4,014	Helston	5,220	33	32	..	2	67	12.83	1.07	3	..	3	3	44.78	42	32	74	14.18	0.74		
2,182	Launceston	4,624	32	27	1	2	62	13.41	1.11	1	..	..	..	..	28	40	68	14.71	0.77
2,704	Liskeard	4,340	30	22	1	1	54	12.44	1.05	1	..	..	1	18.52	33	33	66	15.21	0.68
1,691	Looe	3,714	14	25	3	..	42	11.31	1.08	2	..	..	..	..	21	24	45	12.12	0.74
3,156	Lostwithiel	2,092	20	15	..	2	37	17.68	1.14	2	..	..	..	..	21	21	42	20.08	0.69
4,599	Newquay	9,850	50	38	6	4	98	9.95	0.94	2	2	3	5	51.02	61	77	138	14.01	0.77		
3,343	Padstow	2,560	23	16	..	1	40	15.63	0.98	1	..	1	1	25.00	9	14	23	8.98	0.72		
829	Penryn	4,103	39	35	3	1	78	19.01	1.00	..	..	..	..	..	38	24	62	15.11	0.96
3,155	Penzance	20,210	131	133	10	11	285	14.10	1.02	5	10	10	20	70.16	154	181	335	16.58	0.82		
18,379	St. Austell	23,800	148	159	5	10	322	13.53	1.10	9	3	5	8	24.84	168	201	369	15.50	0.78		
4,287	St. Ives	8,720	68	40	4	4	116	13.30	1.02	5	2	..	2	17.24	62	65	127	14.56	0.71		
7,634	St. Just	4,093	31	23	..	1	55	13.44	1.14	..	1	2	3	54.55	24	38	62	15.15	0.85		
5,335	Saltash	7,570	53	66	3	7	129	17.04	1.02	2	1	2	3	23.26	44	50	94	12.42	0.76		
975	Torpoint	6,952	35	34	..	1	70	10.07	1.50	..	..	..	..	..	22	26	48	6.9	1.49
2,634	Truro City	13,080	93	90	4	1	188	14.37	1.01	10	4	4	8	42.55	59	78	137	10.47	1.01		
99,444	TOTALS	187,657	1222	1177	71	75	2,545	13.56	1.06	71	47	41	88	34.58	1,225	1,373	2,598	13.84	0.83		
RURAL.																					
52,544	Canelford	7,415	43	43	1	4	91	12.28	1.11	2	1	2	3	32.97	51	61	112	15.10	0.80		
90,839	Kerrier	21,360	140	129	4	5	278	13.01	1.03	6	1	2	3	10.8	135	144	279	13.06	0.88		
73,051	Launceston	6,500	41	48	1	3	93	14.30	1.12	1	2	1	3	32.26	36	44	80	12.31	0.83		
104,803	Liskeard	14,210	92	118	6	6	222	15.63	1.16	6	4	2	6	27.03	115	101	216	15.21	0.77		
82,389	St. Austell	20,410	175	148	14	5	342	16.76	1.03	8	6	6	12	35.09	152	124	276	13.53	0.87		
48,433	St. Germans	15,700	129	121	9	6	265	16.88	1.11	6	4	1	5	18.87	130	122	252	16.05	0.78		
56,285	Stratton	5,577	38	39	6	1	85	15.24	1.15	4	2	1	3	35.3	31	32	63	11.30	0.88		
108,316	Truro	27,370	158	167	6	11	342	12.5	1.10	8	3	4	7	20.47	176	202	378	13.81	0.76		
88,230	Wadebridge	16,060	112	100	2	5	219	13.64	1.13	5	7	1	8	36.53	99	89	188	11.71	0.89		
59,792	West Penwith	17,740	140	129	4	4	277	15.61	1.04	8	1	5	6	21.66	88	126	214	12.06	0.82		
764,682	TOTALS	152,342	1068	1042	53	50	2,213	14.52	1.09	54	31	25	56	25.30	1013	1,045	2,058	13.51	0.82		
864,126	Whole County	339,999	2290	2219	124	125	4,758	13.99	..	125	78	66	144	30.26	2,238	2,418	4,656	13.69	..		
4,041	Scilly Isles	1,885	14	16	1	..	31	16.45	1.01	..	..	1	1	32.26	7	8	15	7.96	0.91

Birth and Death rates calculated per 1,000 of the population.

Comparability factors are given for the purpose of securing comparability between local birth and death rates and those for England and Wales.

Estimated Population and Total Number of Births and Deaths in Cornwall (Excluding Scilly Isles) During Recent Years.

YEAR	ESTI- MATED POPU- LATION	LIVE BIRTHS						Stillbirths	DEATHS							
		Legitimate		Illegitimate					Under 1 Year			At all Ages				
		Males	Females	Males	Females	Total	Rate		Males	Females	Total	Rate per 1,000 live Births	Males	Females	Total	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1931	a) 810,827	2186	2054	111	108	4459	14.34	202	141	101	242	54.27	2102	2259	4361	14.04
1932	b) 310,577															
1932	312,269	2161	1989	102	105	4357	13.95	209	137	101	238	54.62	2106	2326	4432	14.19
1933	312,076	2092	1901	103	95	4191	13.43	216	131	87	218	52.01	2105	2375	4480	14.35
1934	312,318	2013	1969	93	118	4193	13.42	206	132	109	241	57.47	1997	2242	4239	13.57
1935	312,090	2073	1913	94	85	4165	13.34	211	117	76	193	46.34	2012	2230	4242	13.59
1936	310,686	2032	1955	99	90	4176	13.44	185	136	78	214	51.24	2071	2225	4296	13.83
1937	308,994	1937	1883	90	83	3993	12.92	173	115	82	197	49.33	2154	2330	4484	14.51
1938	308,297	1927	1933	94	93	4047	13.13	166	136	67	203	50.16	2100	2202	4302	13.95
1939	a) 308,517	1975	1771	85	78	3909	12.67	180	142	88	230	58.84	2227	2375	4602	14.74
	b) 312,211															
1940	329,138	2127	1945	100	96	4268	12.97	163	116	90	206	48.26	2357	2567	4924	14.96
1941	371,382	a) 2215	2125	161	132	4633	12.47	183	159	108	267	52.46	2465	2721	5186	13.96
		c) 2456	2339	160	134	5089		192								
1942	344,944	2427	2212	168	139	4946	14.34	180	135	93	228	46.09	2127	2301	4428	12.84
1943	327,163	2378	2246	183	163	4970	15.19	164	106	72	178	35.81	2201	2388	4589	14.02
1944	322,513	2607	2554	276	236	5673	17.59	180	132	99	231	40.72	2197	2359	4556	14.13
1945	313,559	2225	2199	333	287	5014	16.08	178	101	84	185	36.67	2214	2367	4581	14.61
1946	318,139	2754	2572	229	199	5754	18.09	156	136	87	223	38.75	2168	2817	4555	14.32
1947	321,605	2940	2791	214	166	6111	19.00	177	136	77	213	34.85	2286	2449	4735	14.72
1948	329,828	2603	2463	177	142	5385	16.33	136	117	69	186	34.54	2095	2169	4264	12.93
1949	d) 330,247	2442	2361	138	146	5087	15.41	127	99	65	164	32.24	2242	2416	4658	14.10
	e) 339,077															
1950	e) 339,999	2290	2219	124	125	4758	13.99	125	78	66	144	30.26	2238	2418	4656	13.69

Birth and Death rates calculated per 1,000 of the Population.

- (a) For Birth Rate.
(b) For Death Rate.
(c) For Infant and Maternal Mortality Rates.
(d) Civilian population (for birth and death rates).
(e) Total population (including non-civilians stationed in the county).

TABLE III.

Infectious Diseases notified in each District during the year 1950.

SANITARY DISTRICT	Scarlet Fever	Whooping Cough	Diphtheria	Measles	Pneumonia	Meningococcal infection	Acute Polio-myelitis		Acute Encephalitis	Dysentery	Ophthalmia Neonatorum	Puerperal Pyrexia	Typhoid Fever (including Paratyphoid)	Food Poisoning	Erysipelas	Totals
							Paralytic	Non Paralytic								
URBAN																
Bodmin -	5		..	..	2	..	..	..		22	..	2	1*	1	2	35
Bude-Stratton -	5	1		1	2	..	6	1	1	..	..	.	.	1	..	18
Camborne-Redruth -	31	11	..	12	22	..	5	1		1	..	42	..	..	13	138
Falmonth -	20	45	..	9	6	1	7	1		..	..	3		1	1	94
Fowey -	1	2	..	1	..	1	11	4	..	..	..	..	1			21
Helston -	2	5	..	58	..		1	..	..	..	..	..	..		..	66
Launceston -	..	13	..	..	2		2	1	..	..	..	..	..	..	2	20
Liskeard -	1	1		3	1	..	..	..	..	..	..	..	..		3	9
Looe -	5	13		5	4	..	3	1	..	..	..	..	..	..	1	32
Lostwithiel -	6	27	..	..	10	..	..	..	..	..	..	..	..	..	..	43
Newquay -	20	23		8	2	..	1	..	..	..	..	..	..	8	..	62
Padstow -	1	8	..	1	..	..	2	..	..	..	..	..	..	1	..	13
Penryn -	9	5	..	1	1	..	4	..	..	..	..	..	..	..	2	22
Penzance -	7	44	3	4	..	..	2	..	..	..	..	.	..	..	..	60
St. Austell -	9	23	..	58	3	..	3	..	..		1	4	..	3	..	104
St. Ives -	7	..	9	212	..	1	1	..	..	3	..	1	.	1	..	235
St Just -	4	30	..	..	..	..	..	..	..	..	..	..	..	7	.	41
Saltash -	6	36	..	6	17	..	1	1	..	..	..	..	..	..	8	75
Torpoint -	1	1	1	1	10	..	..	1	..	..	..	..	..	..	2	17
Truro City -	5	1	..	3	9	..	1	..	..	1	..	..	..		2	22
TOTALS -	145	289	13	383	91	3	50	11	1	27	1	52	2	23	36	1127
RURAL																
Camelford -	9	13	..	3	13		1	..	..	..	..	..	..	9	3	51
Kerrier -	7	33		19	4	1	6	2	..	..	1	1	..		1	75
Launceston -	2	18	2	1	1	..	1	.	..		..	..			1	26
Liskeard -	5	13	1	3	13	1	2	1	..	..	..	..	..		2	41
St. Austell -	5	34	..	219	3	1	4	..	..	..	..	..	..	..	..	266
St. Germans -	26	100	..	5	21	1	4	..	..	..	..	1	..	..	3	161
Stratton -	3	19	..	..	7	1	7	3	..	..	..	..	..	..	1	41
Truro -	17	93	..	15	53		1	..	..	..	..	2	..		2	183
Wadebridge -	31	40	..	9	5	..	2	..	..	..	..	1	..	55	2	145
West Penwith -	13	77	..	11	10	..	3	..		..	..	1	..		3	118
TOTALS -	118	440	3	285	130	5	31	6	..		1	6	..	64	18	1107
Whole County -	263	729	16	668	221	8	81	17	1	27	2	58	2	87	54	2234

There were no cases of Smallpox, Malaria, or Paratyphoid Fevers during the Year.

*Non-Civilian.

TABLE IV.

NUMBER OF CASES OF INFECTIOUS DISEASE NOTIFIED IN
RECENT YEARS.

Infectious Disease	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Scarlet Fever ...	580	228	229	384	386	280	167	176	214	263
Whooping Cough ...	1210	696	474	1179	473	550	720	1393	641	729
Diphtheria ...	523	389	225	164	206	155	44	27	3	16
Measles ...	5664	184	1918	1544	3989	267	2288	2286	3569	668
Pneumonia ...	283	248	313	339	242	205	221	170	208	221
Cerebro-spinal Fever ...	95	42	28	28	18	17	9	4	2	8†
Acute Poliomyelitis	16	3	—	3	28	3	32	17	105	} 98†
Acute Polio- Encephalitis ...	1	1	—	2	1	1	—	1	5	
Acute Encephalitis Lethargica ...	1	1	1	2	1	1	—	—	—	
Dysentery ...	95	38	61	95	117	17	29	17	38	27
Ophthalmia Neonatorum ...	28	18	24	34	21	14	13	6	4	2
Puerperal Pyrexia	56	65	70	76	61	89	79	51	71	58
Smallpox ...	—	—	—	—	—	—	—	—	4	—
Paratyphoid Fevers	—	—	6	6	4	1	4	1	1	—
Typhoid Fever (excluding Paratyphoid) ...	32	13	7	6	2	—	—	2	—	2
Food Poisoning* ...	—	—	—	—	—	—	—	—	27	87
Erysipelas ...	95	87	71	75	65	58	48	42	52	54
Malaria ...	2	1	9	35	17	12	1	3	—	—
TOTALS	8681	2014	3436	3972	5631	1670	3655	4196	4944	2234

*—Not included in returns to Registrar-General until 1.1.49.

†—Under the Public Health (Acute Poliomyelitis, Acute Encephalitis, and Meningococcal Infection) Regulations, 1949, which came into operation on 1st January, 1950,

(i) Acute Poliomyelitis includes Acute Polioencephalitis.

(ii) The Public Health (Cerebro-spinal Fever and Acute Poliomyelitis) Regulations, 1912, and the Public Health (Acute Encephalitis Lethargica and Acute Polioencephalitis) Regulations, 1918 and 1919 are revoked, and Meningococcal Infection made notifiable.

TABLE V.

CAUSES OF DEATH AT SPECIFIED AGES, 1950.

Cause of Death	All Ages	0—	1—	5—	15—	25—	45—	65—	75—
1. Tuberculosis, res- piratory ...	108	—	—	—	4	40	42	18	4
2. Tuberculosis, other ...	18	1	3	1	2	4	4	1	2
3. Syphilitic disease ...	13	—	—	—	—	1	5	5	2
4. Diphtheria ...	1	—	—	1	—	—	—	—	—
5. Whooping Cough ...	1	1	—	—	—	—	—	—	—
6. Meningococcal Infections ...	3	—	3	—	—	—	—	—	—
7. Acute Poliomyelitis ...	10	1	—	2	3	3	1	—	—
8. Measles ...	—	—	—	—	—	—	—	—	—
9. Other infective and parasitic diseases ...	15	—	—	1	2	1	2	2	7
0. Malignant neoplasm, stomach ...	129	—	—	—	—	2	25	58	4
1. do. lung, bronchus ...	60	—	—	—	—	4	34	18	44
2. do. breast ...	67	—	—	—	—	5	24	22	16
3. do. uterus ...	48	—	—	—	—	3	19	14	12
4. Other malignant lym- phatic neoplasms ...	374	—	2	1	2	25	104	123	117
5. Leukaemia, aleukae- mia ...	11	—	1	—	1	—	7	1	1
6. Diabetes ...	45	—	—	—	1	1	—	19	13
7. Vascular lesions of nervous system ...	606	1	—	—	—	5	111	193	296
8. Coronary disease, Angina ...	481	—	—	—	—	2	147	167	165
9. Hypertension with heart disease ...	133	—	—	—	—	3	24	45	61
20. Other heart disease ...	1106	—	—	1	—	5	91	262	747
21. Other circulatory disease ...	145	—	—	—	1	4	20	37	83
22. Influenza ...	42	1	1	2	—	1	8	8	21
23. Pneumonia ...	154	16	12	2	1	7	27	38	51
24. Bronchitis ...	157	1	—	—	1	2	26	39	88
25. Other diseases of respiratory system ...	43	1	2	2	—	4	16	9	9
26. Ulcer of stomach and duodenum ...	31	—	—	—	—	3	12	11	5
27. Gastritis, enteritis and diarrhoea ...	27	6	1	1	—	3	5	4	7
28. Nephritis and nephrosis ...	81	1	—	2	3	7	16	18	34
29. Hyperplasia of prostate ...	59	—	—	—	—	—	6	11	42
30. Pregnancy, childbirth, abortion ...	8	—	—	—	3	5	—	—	—
31. Congenital malforma- tions ...	27	15	3	1	2	—	3	1	2
32. Other defined and ill- defined diseases ...	523	98	7	1	7	30	82	78	220
33. Motor vehicle acci- dents ...	28	—	—	3	9	9	3	2	2
34. All other accidents ...	83	2	2	3	9	20	17	13	17
35. Suicide ...	32	—	—	—	1	8	16	4	3
36. Homicide and opera- tions of war ...	2	—	—	—	—	—	2	—	—
All causes ...	4671*	145	37	24	52	207	910	1221	2075

*--including 15 deaths in the Scilly Isles

TABLE VI.
MATERNITY AND CHILD WELFARE.

Year	Total No. of births	Percentage of total births occurring in			Midwives	
		Patient's home	Redruth Maternity Unit and other Hospitals	Nursing Homes	Total No. Practising	No. employed by C.C.N.A. or C.C.
1	2	3	4	5	6	7
1915	5854	—	—	—	187	112
1920	6964	—	—	—	188	135
1925	4950	—	—	—	208	135
1930	4847	—	1.4	—	218	149
1935	4376	—	3.3	—	214	163
1940	4431	—	6.5	—	251	184
1941	5281	65.2	19.1	15.7	231	137
1942	5126	63.4	20.1	16.5	238	157
1943	5134	58.5	19.8	21.7	186	152
1944	5853	54.0	25.0	21.0	250	154
1945	5222	54.0	23.0	23.0	223	152
1946	5910	56.4	21.2	22.4	181	137
1947	6288	58.3	19.7	22.0	195	145
1948	5521	57.3	23.8	18.9	193	140
1949	5214	56.7	33.2	10.1	215	128
1950	4883	58.2	29.5	12.3	187	123

